ACT Government
Environment and Sustainable Development

Molonglo commercial centre and environs
Draft concept plan

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Coppins
Crossing
John Gorton Drive
MOLONGLO RIVER
MOLONGLO
DENMAN
PROSPECT
east-west arterial

Introduction

The suburbs of Molonglo and Denman Prospect are located in the district of Molonglo Valley in stage 2, north of the suburbs of Coombs and Wright (stage 1). Molonglo is located on the eastern side of John Gorton Drive and Denman Prospect is located on the western side of John Gorton Drive. The principal commercial centre for the district and residential environs is located in Molonglo and part of Denman Prospect.

Application

This concept plan applies to land at Molonglo and part of Denman Prospect in Molonglo Valley stage 2, as shown in Figure 1 and Figure 2.[1]

Purpose

The purpose of this plan is to provide a robust framework to facilitate development and implementation of the vision for Molonglo commercial centre[2] and environs in stage 2 over time. The plan will, together with other relevant codes of the Territory Plan:

- guide the design and assessment of estate development plans (EDP), which are subdivision proposals
- inform the allocation of final zones on a parcel of land when that parcel ceases to be part of the future urban area following subdivision
- guide the development of individual blocks and the public realm.

Code hierarchy

This concept plan is based on the principles and policies set out in the Structure Plan – Molonglo and North Weston of the Territory Plan. This concept plan is deemed to be a **precinct code** under the *Planning and Development Act 2007.* More than one type of code may apply to a particular development proposal. Occasionally inconsistencies between the codes' provisions may arise, particularly where a precinct code seeks to apply special provisions in response to particular local circumstances of planning issues. Where this occurs, a **precinct code** prevails over a **development code** and a **general code**, but only to the extent of the inconsistency.

Interpretation

This concept plan contains **rules**, which provide the quantitative or definitive controls for development, and **criteria**, which provide qualitative controls for development. In some instances rules are mandatory and are marked 'This is a mandatory requirement. There is no applicable criterion'. Non-compliance with a mandatory rule will result in the refusal of a development application. In other instances the words 'There is no applicable rule' are used and the proposal is assessed against the relevant criterion. Where both rule and criterion apply, compliance with the rule is deemed to satisfy the particular requirement. Provided the relevant criterion can be met, strict compliance with the rule is not required.

This plan and any development application for works in this area must be consistent with the Molonglo Valley Plan for the Protection of Matters of National Environmental Significance (NES Plan) and the s. 211 exemption for the Molonglo Valley Stage 2 – Urban Development, Infrastructure and Link Bridge.

Figure 1: Location of Molonglo commercial centre and environs in Molonglo Valley stage 2

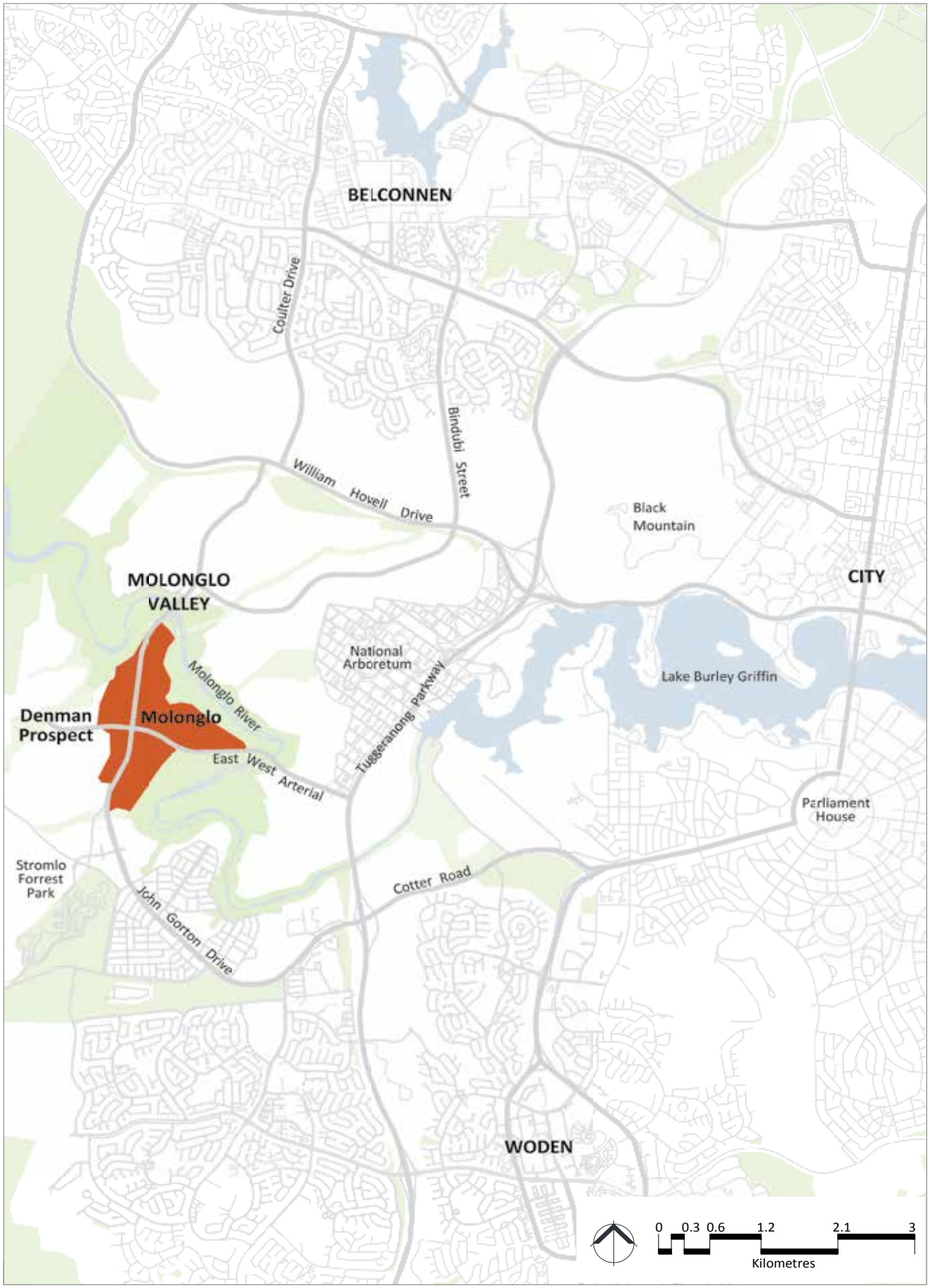
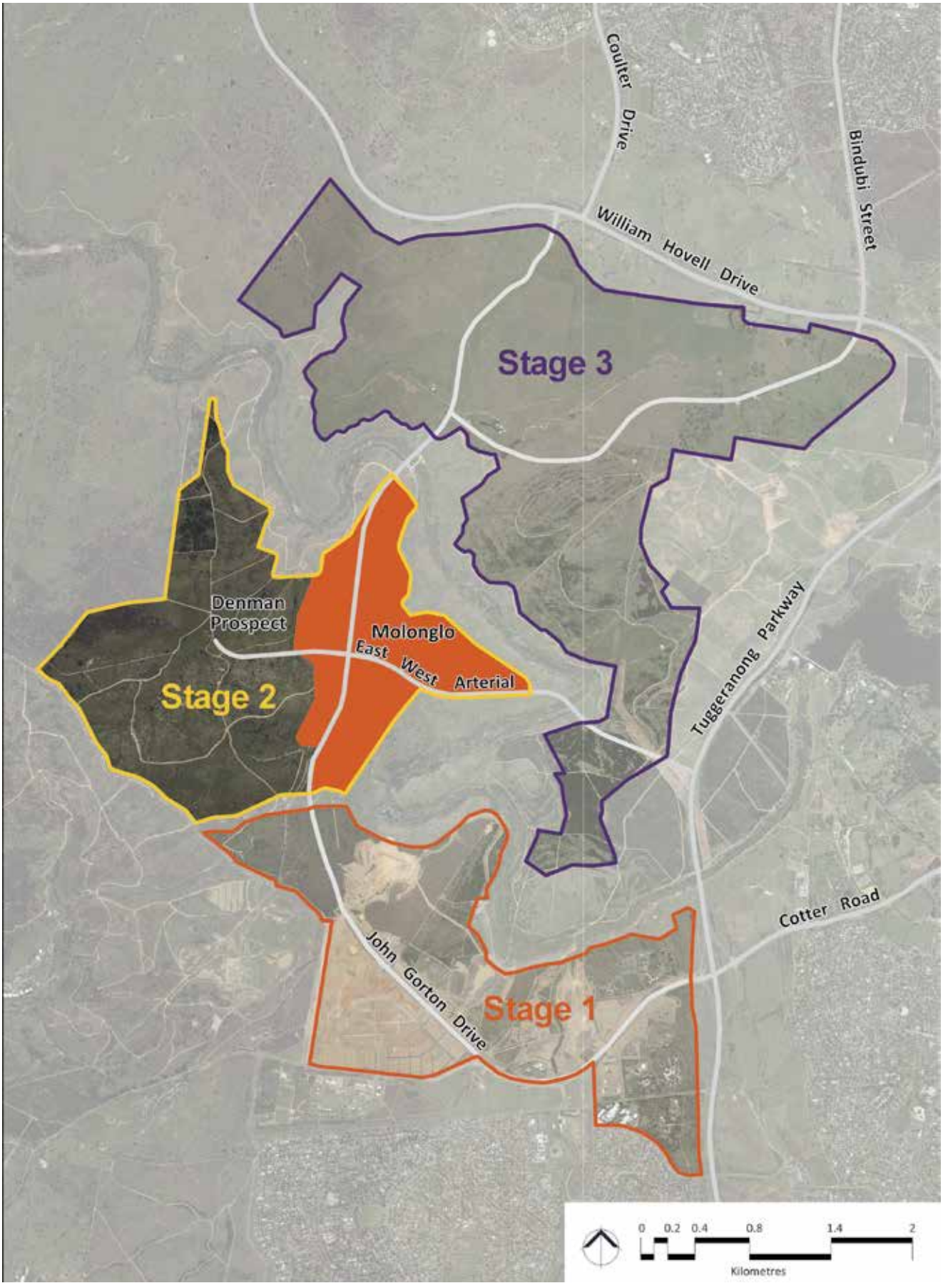


Figure 2: Three development stages in Molonglo Valley and Molonglo commercial centre and environs (shaded)



Desired planning outcomes

An indicative development outcome for Molonglo commercial centre and environs is provided in Figure 3 (refer also to Figures 4-6). The desired planning outcomes of the development controls (i.e. objectives, design intent, rules and criteria) set out in this plan are to:

a. promote the centre as the principal commercial centre for the district of Molonglo Valley

b. allow for zoning to accommodate higher residential densities and building heights, community facilities and mixed-use retail/ commercial development in the commercial centre core precinct[3], close to areas of higher amenity and transport corridors

c. encourage active travel such as walking and cycling and the use of public transport

d. provide a legible and permeable street and path network that integrates safe and adequate pedestrian, cycle, vehicular and public transport access and connectivity to the commercial centre core, residential precincts and surrounding suburbs, retail/commercial, employment and community facilities and features such as Stromlo Forest Park, Molonglo River Park and the urban open space network

e. provide diverse housing types, block sizes, densities and affordability to meet the changing needs of households and to encourage the formation of a diverse community

f. make provision for retail/commercial uses and community facilities that are collocated where possible with a high level of access and amenity to foster a sense of place and community identity

g. encourage the integrated provision of community facilities that effectively meets the future needs of residents and workforce through the clustering, shared and multiple use of community facilities

h. adhere generally to the principles of a child friendly city promoted by UNICEF (United Nations Children's Fund)

i. incorporate principles of contemporary best practice for energy efficiency, water conservation, solar access and ecological sustainability

j. retain the landscape setting and significant natural elements in an urban open space network that responds to the topography, contributes to place-making and connects to adjacent suburbs

k. minimise the impact of the traffic noise from arterial roads on residential development

l. protect and enhance local biodiversity corridors, significant trees and matters of national environmental significance, including Pink-Tailed Worm Lizard of moderate or high quality habitat ranking

m. ensure protection of areas or items of heritage significance

n. maximise features of the area, including views of the city centre, Black Mountain and Brindabella Range, and access to Molonglo River Park and associated stormwater ponds

o. reduce bushfire risk and provide appropriate bushfire protection

p. employ stormwater management measures and encourage efficient use of water through water sensitive urban design measures

q. encourage the efficient use of energy through block energy ratings, the integration of public transport, and a neighbourhood layout that promotes walking and cycling.

Figure 3: Public realm master plan – an indicative development outcome

Figure 4: Key plan for artist impressions illustrating street elevations 1-2

Figure 5: Artist impression illustrating street elevation 1 along the cross street central looking north

Figure 6: Artist impression illustrating street elevation 2 along the east-west arterial looking north

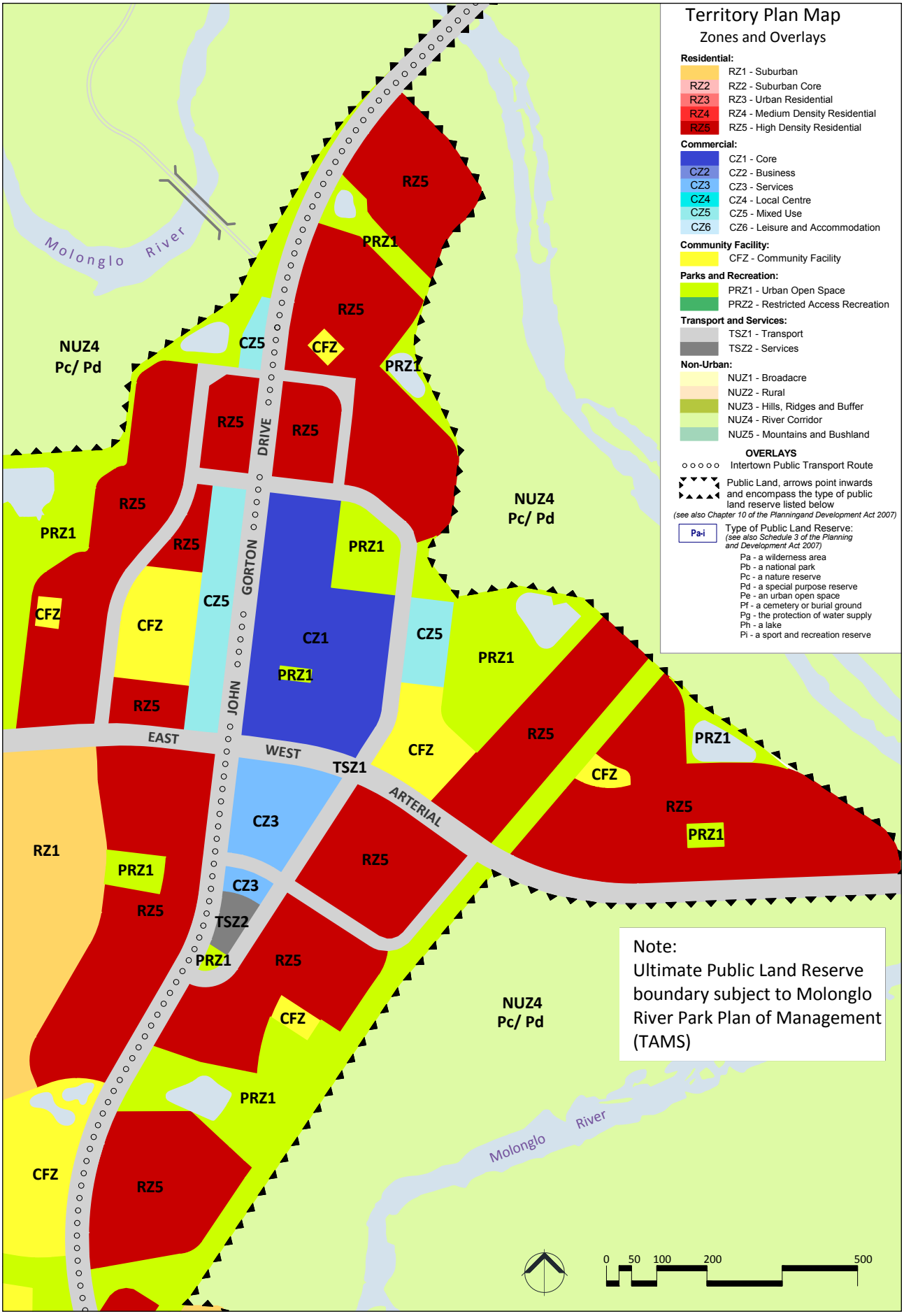
Element A – Layout

1 Land use

Objective
To promote the centre as the highest order commercial centre and the focal place for the district, with a range of commercial/retail, business, community, education, entertainment, civic and residential uses and employment opportunities, in a compact, vibrant mixed-use layout.

Rules	Criteria
There is no applicable rule.	C1 The land use layout is not inconsistent with the principles outlined in Figure 7 and achieves all of the following: a. the commercial centre core is located at the junction of the arterial roads, east of John Gorton Drive[4] and north of the east-west arterial through the commercial centre core (the corso) b. the town park and college precinct is located immediately to the east of the commercial centre core c. mixed-use development is located adjacent to and with a direct relationship to the commercial centre core and other key activity nodes d. the residential precincts (C-G) are located around the commercial centre core and the town park and collect precinct e. community facilities, recreational facilities and public open space are distributed throughout the residential precincts (C-G) and in walking distance to residences to create a local central focus f. the highest density and diversity of land uses are located in close proximity and within 400 m (five minute walk) to: i. Frequent Network[5] public transport services ii. the commercial centre core iii. the town park and college precinct iv. other key attractions and points of interest.

Figure 7: Land use

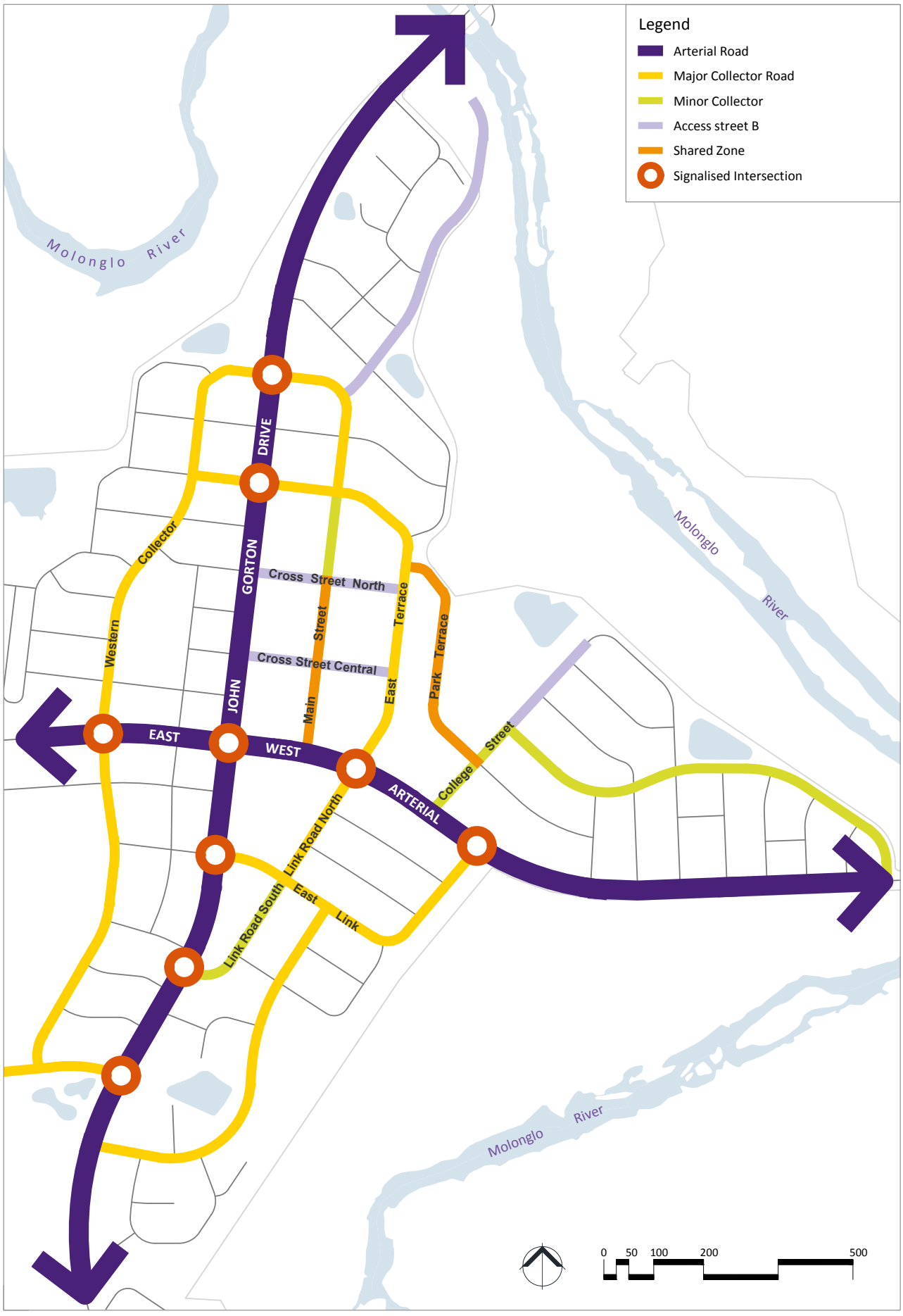


2 Street network hierarchy

Objective
To provide a legible and permeable street network that distributes vehicular traffic appropriately throughout the urban area and supports the intended function and character of the respective urban development precincts and land use zone objectives.

Rules	Criteria
R2 The street network hierarchy is in accordance with Figure 8.	C2 Reclassification of any street in the street network hierarchy is to be undertaken in consultation with the planning and land authority.
There is no applicable rule.	C3 The street network hierarchy is not inconsistent with the principles in Figure 8 and achieves all of the following: a. traffic volumes are distributed appropriately throughout the urban area to balance local and through-traffic demands b. the layout is interconnected, legible and permeable c. active travel such as cycling and walking and the use of public transport is encouraged by a fine-grained network d. design speeds, verge treatments and pavement widths are appropriate for public and residential amenity, safety and access e. gradients are acceptable for all users including pedestrians, cyclists, public transport and cars f. choices of routes to walk, cycle, drive and take public transport to key attractions are direct and easily understood g. orientation of blocks and buildings for solar access is optimised by generally having a north-south or east-west layout h. the layout responds to topography, significant vegetation, waterway corridors and drainage patterns i. there is a variety of street types and scales to suit movement requirements and to accommodate diverse urban functions, scales and forms of development j. road reserve widths allow for appropriately scaled street trees and verge treatments for shade and character, to maximise tree size to suit building setbacks and verge widths, and for climatic comfort k. there are opportunities for passive surveillance to improve public safety l. vehicle headlight and streetlight glare towards Mount Stromlo Observatory is minimised m. the pattern of street trees and key nodes (e.g. parks, ponds, gateways and vistas) reinforces a memorable and easy to understand (i.e. legible) urban structure.

Figure 8: Street network hierarchy

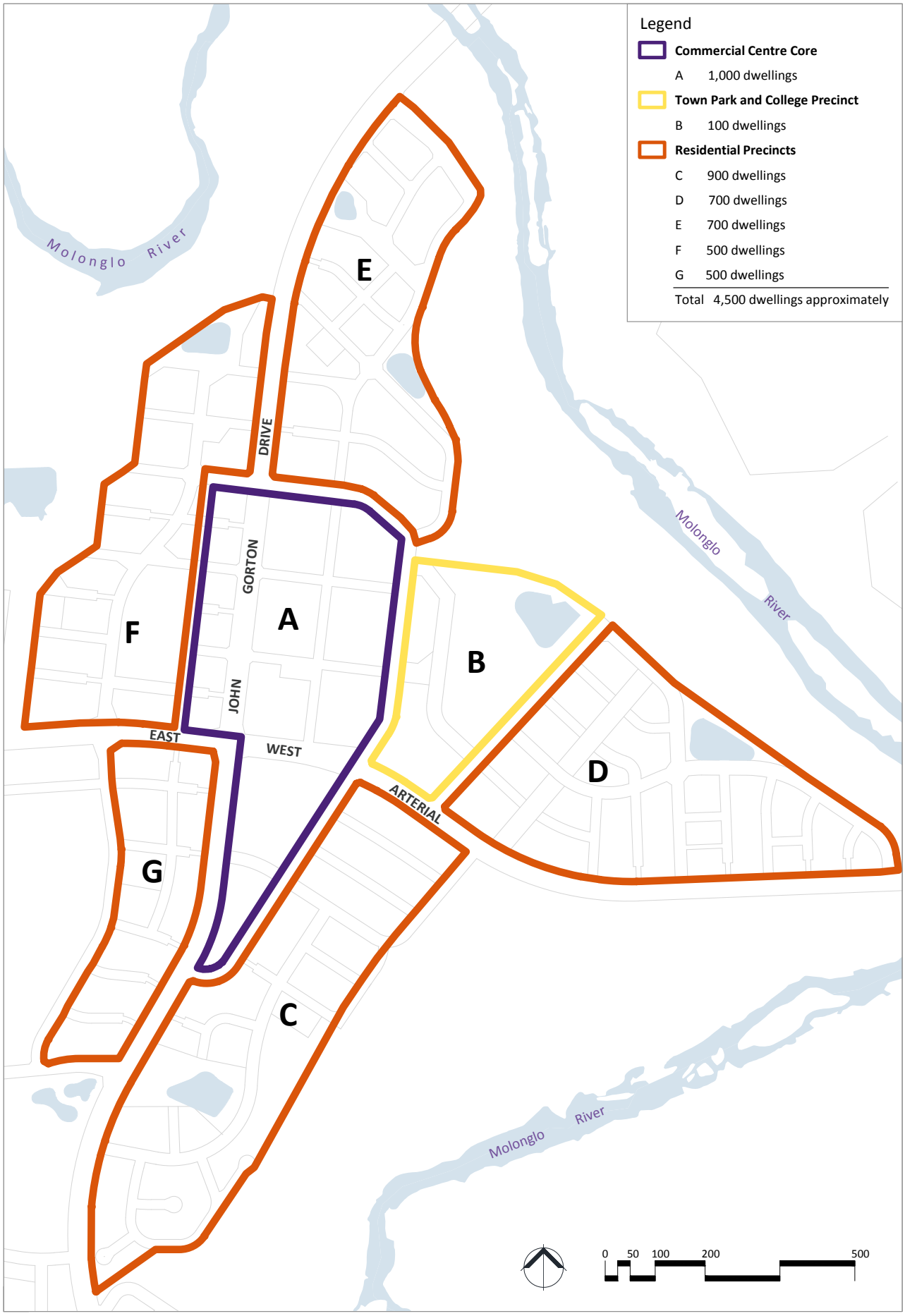


3 Dwelling yields

Objective	
To reduce urban sprawl on limited developable land in the ACT generally, and to provide residents with a greater mix of housing, ready access to the range of uses the area offers, and a high level of public amenity.	
Rules	**Criteria**
R4 Dwelling yields for each precinct are in accordance with Figure 9.	C4 Dwelling yields are generally consistent with the targets outlined in Figure 9 and achieve all of the following: a. a compact, mixed-use community is developed b. public transport and active travel are supported c. activity hours in the commercial centre core are extended d. investment in, and utilisation of, services and amenity located in the commercial centre core is optimised e. higher residential and commercial densities are close to the commercial centre core, the Frequent Network and areas of high public amenity f. a diversity in dwelling types is provided that support: i. a range of housing forms ii. a range of household types iii. the demographic needs of the community iv. housing affordability.

Artist impression illustrating the future desired character of the urban edge looking north-east towards the link bridge

Figure 9: Dwelling yields (minimum)

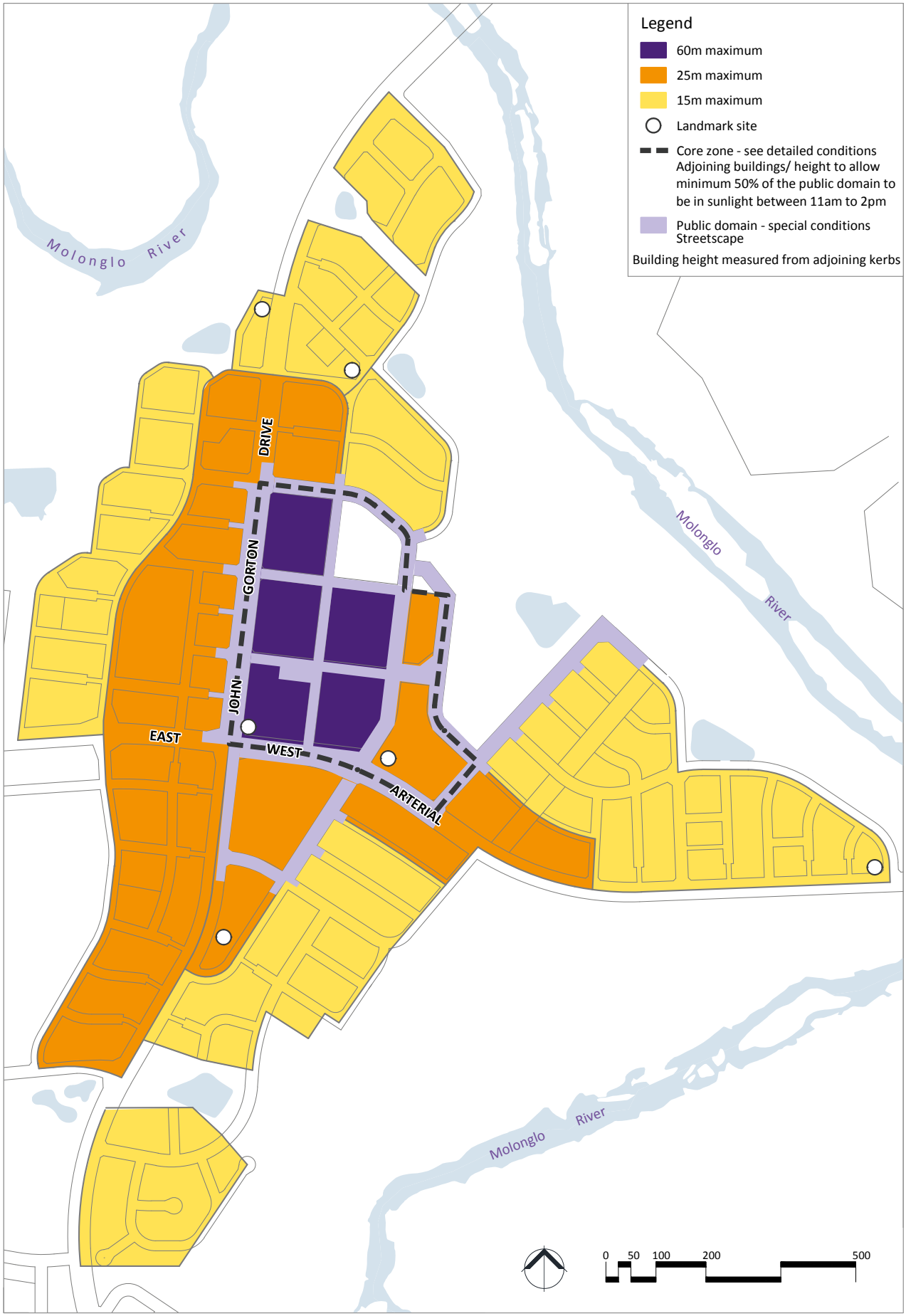


4 Building heights

Objectives
To permit taller buildings in order to accommodate a high population in the commercial centre core, to create a vibrant public realm and distinctive urban form, and to provide incentives for private and public investment. To ensure building heights do not adversely impact on the amenity and quality of the public domain.

Rules	Criteria
R5 Building heights are in accordance with Figure 10.	C5 Building heights are not inconsistent with the principles outlined in Figure 10[6] and achieve all of the following: a. public amenity in important pedestrian open spaces is protected from excessive overshadowing and wind tunnelling effects b. development density in and around the commercial centre core provides for a higher population to optimise and underpin investment in the public realm and to activate a diverse range of uses c. a distinctive urban silhouette of taller buildings identifies the commercial centre core in Molonglo Valley d. well designed and relatively dense urban neighbourhoods are promoted that respond to the natural topography, significant views and vistas, and have access to open space e. elevated and split-level building construction is encouraged to sensitively manage level changes on steeper slopes and minimise cut and fill f. buildings in the commercial centre core can exceed a plot ratio of 1:1 in this CZ1 – Core Zone g. for taller buildings: i. podiums are encouraged, having a general height of two to three storeys, to provide an appropriate pedestrian scale and continuous active street frontages ii. podiums should be set back, and podium roof gardens should be provided to reduce the urban heat island effect[7], and for landscape amenity and attractive outlook for surrounding residents.

Figure 10: Building heights

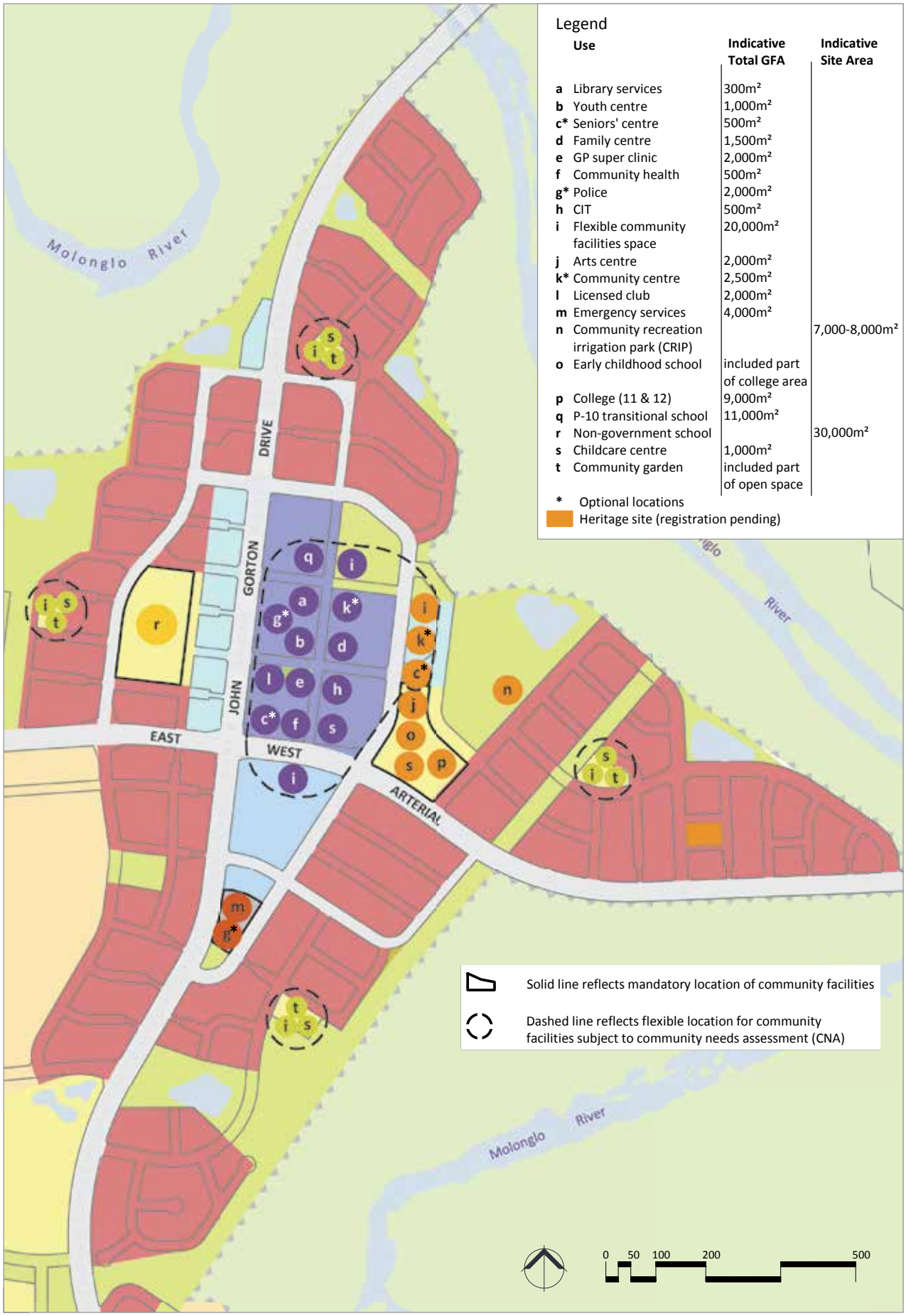


5 Community facilities

Objective	
To provide adequate community infrastructure that meets local and district community needs to foster social networks and interaction, and enhance health, wellbeing and quality of life for residents.	
Rules	**Criteria**
R6 Prior to the endorsement of any estate development plan the applicant, in consultation with the planning and land authority, is required to prepare and submit to the authority a Community Needs Assessment[8] to support the proposed community facility allocation. The agreed outcomes of any Community Needs Assessment will, together with C7 and Figure 11, provide guidance to the authority in the determination of community facility allocation for inclusion in subsequent precinct codes.[9-10]	This is a mandatory requirement. There is no applicable criterion.
There is no applicable rule.	C7 Community facilities are not inconsistent with the principles outlined in Figure 11 and achieve all of the following: a. local and district community needs are met b. flexibility and collocation with other community facilities is promoted c. there is pedestrian scale interaction at the street level, contributing to active frontage of streets in the commercial centre core d. there is ease and equity of access e. innovation is reflected in the provision of facilities and services f. high quality built form and public domain environments are provided g. facilities and services are concentrated in the commercial centre core and the town park and college precinct h. facilities are integrated in the residential precincts (C-G) and places of public interest in accessible, prominent locations.
There is no applicable rule.	C8 Community facilities located in the commercial centre core and the town park and college precinct in Figure 11 have a ground floor presence[11] and pedestrian-scale entry at street level, in an internal pedestrian arcade or pedestrian mall above or below street level.

Rules	Criteria
R9 Provide a site at location P in Figure 11 with a minimum site area of 2 hectares for a government education facility.	C9 Provide a site in the vicinity of location P in Figure 11 with a minimum site area sufficient to accommodate a government education facility to the satisfaction of the planning and land authority.
R10 Provide a site at location R in Figure 11 with a minimum site area of 3 hectares for a non-government education facility.	C10 Provide a site in the vicinity of location R in Figure 11 with a minimum site area sufficient to accommodate a non-government education facility to the satisfaction of the planning and land authority.
R11 Provide sites with minimum site areas of 1,000 m^2 for flexible community uses within 400 m (5 minute walk) of all residences outside the commercial centre core and the town park and college precinct.	C11 The size, location and distribution of community facilities sites outside the commercial centre core and the town park and college precinct in Figure 11 are provided to the satisfaction of the planning and land authority.
R12 Provide a site at location G and M in Figure 11 with a minimum site area of 0.7 ha for emergency services and a police station, of an urban design quality appropriate to a main entry to the commercial centre core.	C12 Provide a site at location G and M in Figure 11 with a minimum site area sufficient to accommodate emergency services and a police station to the satisfaction of the planning and land authority, of an urban design quality appropriate to a main entry to the commercial centre core.

Figure 11: Community facilities



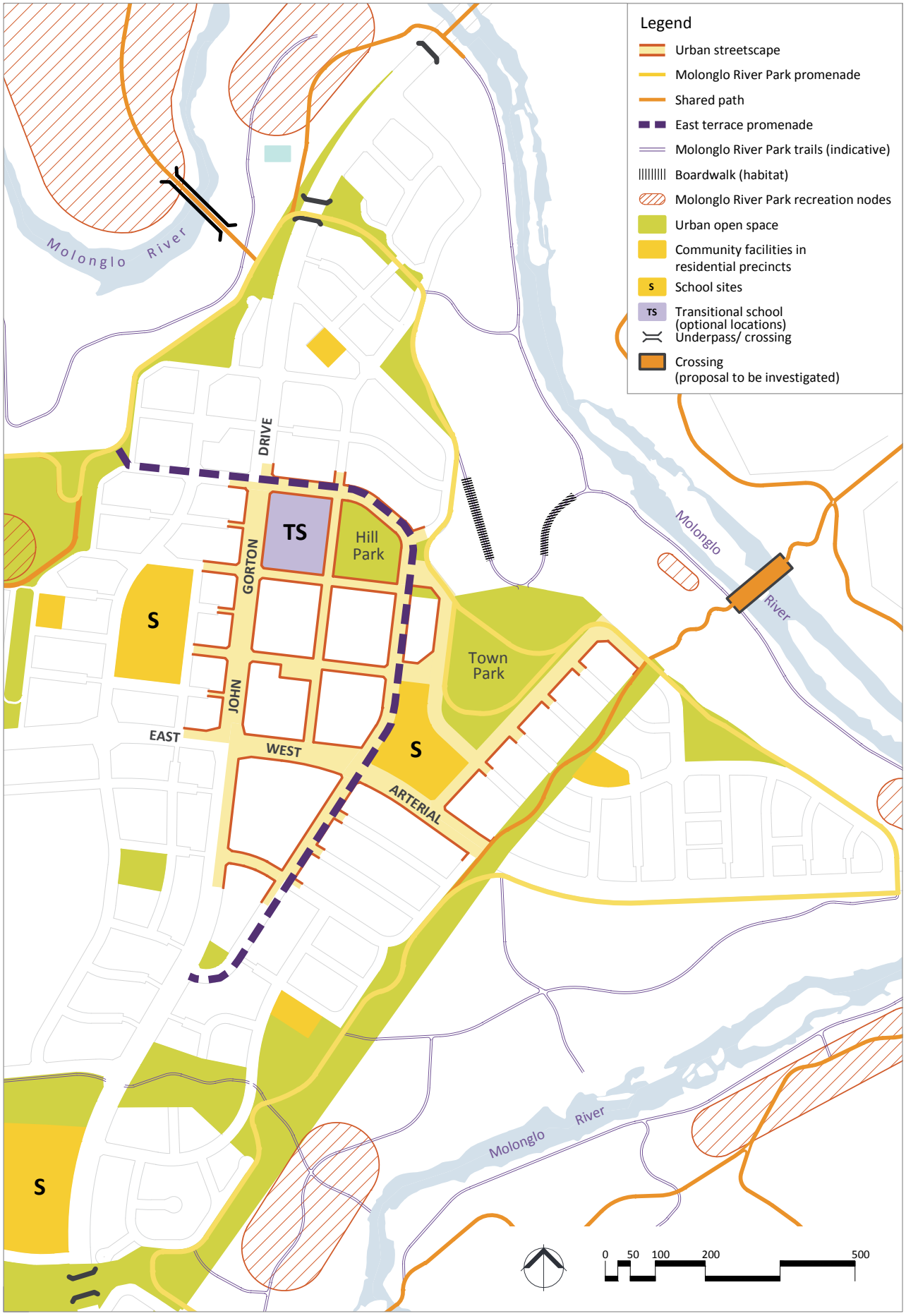
Artist impression illustrating the future desired character of the town plaza

Element B – Walking, cycling and public transport networks

6 Walking network

Objective	
To provide a walking network that is visually connected, accessible, permeable, safe and legible and encourages people to walk.	
Rules	**Criteria**
There is no applicable rule.	C13 The walking network is not inconsistent with the principles outlined in Figure 12 and achieves all of the following: a. the network provides memorable vistas and direct and legible routes to key attractions such as shops, public transport stops, community facilities, places of employment, parks and open spaces b. most parts of the residential precincts (C-G) are generally located within 400 m (five minute walk) of a central neighbourhood focus such as shops, parks, schools and other community facilities c. the network connects to the surrounding open space network and key attractions, such as Molonglo River Park and promenade d. passive surveillance is provided to and from the street to improve public safety e. pavement treatment, street furniture and lighting is appropriate to high use urban areas f. safe and easy access for people of all abilities is provided g. intersections are designed for high pedestrian priority h. impacts on matters of National Environmental Significance (NES) are minimised.

Figure 12: Walking network

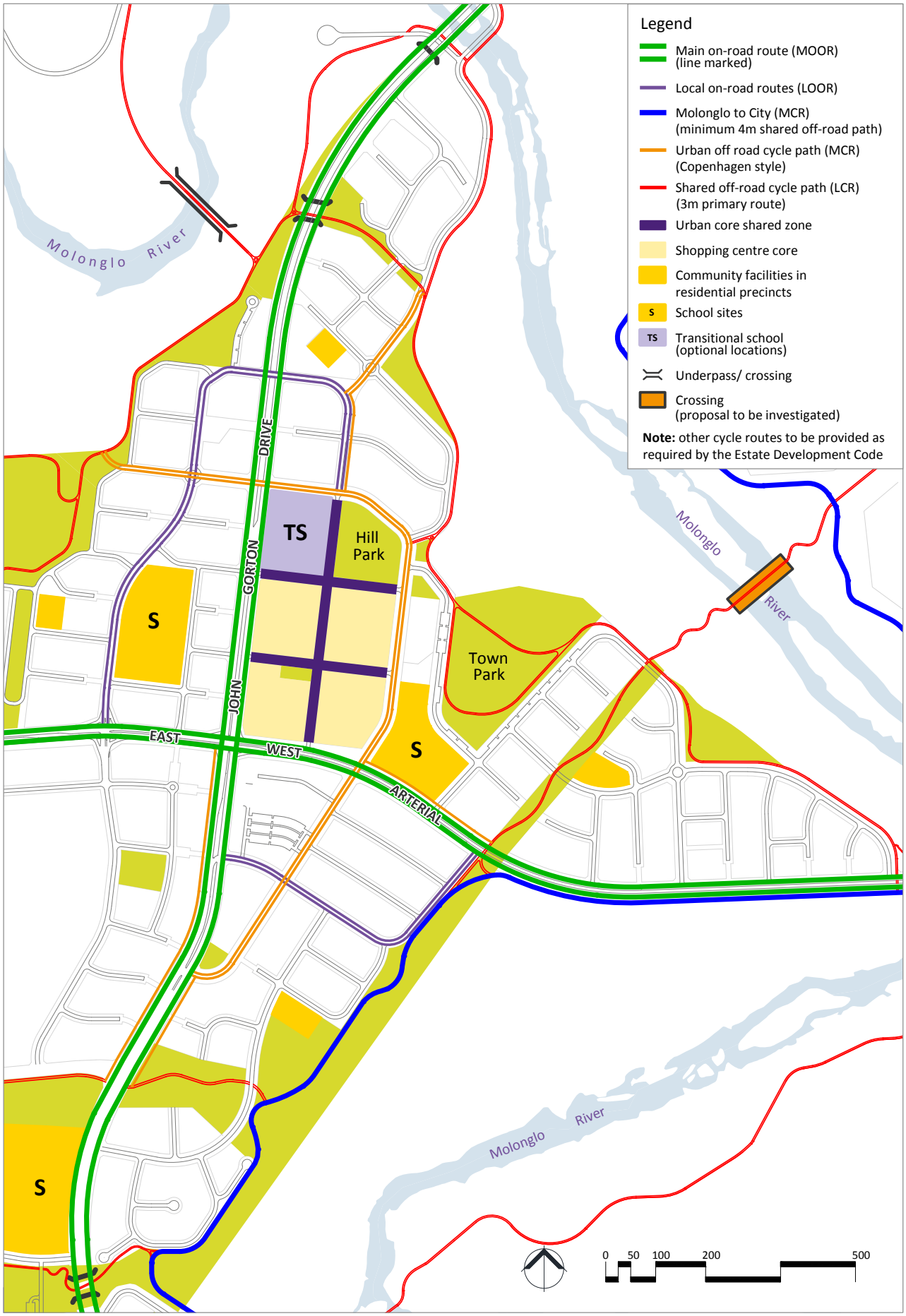


7 Cycling network

Objective	
To promote cycling as a safe and attractive transport option for Molonglo residents and visitors.	
Rules	**Criteria**
There is no applicable rule.	C14 The cycling network is not inconsistent with the principles outlined in Figure 13 and achieves all of the following: a. the recreational and commuter cycling network is safe, convenient and legible b. cycle parking facilities are integrated with public transport and other attractions in the network c. the network responds to natural topography to ensure acceptable grades d. the network supports physical and visual connections to the regional shared path cycle network and places of interest and community attractions, including Stromlo Forest Park, Lake Burley Griffin, Molonglo River Park, National Arboretum and others e. on-road and off-road networks are integrated f. potential conflicts between on-road cyclists and cars are minimised g. ACT Strategic Cycle Network Plan requirements are met h. pedestrian verges are wide enough to accommodate a marked cycle path (for urban off-road cycle path MCR Copenhagen style) i. impacts on matters of NES are minimised.

Artist impression illustrating the future desired character of the town plaza

Figure 13: Cycling network



8 Public transport network

Objective	
To support the establishment of transit-oriented development[12] and reduce dependency on private vehicle use.	
Rules	**Criteria**
There is no applicable rule.	C15 a. The public transport network is not inconsistent with the principles outlined in Figure 14 and achieves all of the following: b. public transport is accommodated on key transport corridors c. frequent, direct and efficient public transport is facilitated d. key attractions and local points of interest are connected e. safe and easy access for people of all abilities is provided f. safe pick-up and set-down environments for schools are provided g. the network is integrated with neighbouring local transport services and related infrastructure h. the network is consistent with Transport for Canberra's Strategic Public Transport Network Plan principles i. a bus layover is provided that: i. is located in the vicinity of the commercial centre core at the convergence of the Frequent Network (Frequent Rapid and Frequent Local) public transport routes and associated infrastructure ii. accommodates an associated modern, fully enclosed, comfortable and secure transport operators' rest room facility with separate meals room and washroom facilities.

Figure 14: Public transport network

Element C – Public realm

9 Urban edge

Objective
To create an attractive recreation precinct that establishes a clear perimeter for the urban development area while protecting and enhancing the ecological and social value of Molonglo River Park, accommodating essential trunk infrastructure, optimising development yield and managing urban stormwater in accordance with water sensitive urban design principles.

Rules	Criteria
R16 Prior to the endorsement of any estate development plan (EDP), the applicant is to ensure the urban development area is consistent with the Molonglo stage 2 Urban Edge Master Plan 2014 (study area outlined in Figure 15), to the satisfaction of the planning and land authority.	C16 The urban edge is not inconsistent with the principles outlined in the Molonglo stage 2 Urban Edge Master Plan 2014 (study area outlined in Figure 15), and achieves all of the following: a. a clear and manageable urban development boundary is established between Molonglo River Park and urban area b. a promenade is provided with high levels of pedestrian and landscape amenity, linking key places of interest along the urban edge c. visually inspiring landscape treatments are provided commensurate with an important urban centre d. continuous edge streets, bushfire protection zones, and controlled vehicular access points to Molonglo River Park for bushfire management and general maintenance are provided e. robust measures are provided to minimise the impact on Pink-Tailed Worm Lizard habitat and Box Gum Woodland in Molonglo River Park from stormwater runoff, edge road earthworks, trunk infrastructure, fire protection, and pedestrian and cycle paths f. continuous shared pedestrian and cycle path infrastructure is provided along the urban edge g. trunk infrastructure services are planned and integrated with paths and recreational networks, and environmental management needs h. designs comply with the environmental requirements of the NES Plan and the Plan of Management for Molonglo River Reserve.

Figure 15: Urban edge master plan study area

10 Outdoor lighting

Objective	
To ensure all development minimises upward light spill and impacts given the proximity of the area to the Australian National University's Mount Stromlo Observatory.	
Rules	**Criteria**
There is no applicable rule.	C17 The use of up-lighting of buildings and structures is to be generally avoided and, where it is used, be carefully designed to keep night time overspill lighting to a minimum.
There is no applicable rule.	C18 Outdoor areas are be lit predominantly with high pressure sodium light sources for streets and pedestrian routes.
There is no applicable rule.	C19 Lighting for commercial and multi-unit development, road lighting and advertising signs ensures upward light spill is minimised.
There is no applicable rule.	C20 Large canopy trees are used in street design to minimise headlight glare.

Artist impression illustrating the future desired character of the town park looking northwest

11 Commercial centre core special conditions

11.1 Car parking

Objective	
To provide car parking and traffic management in the commercial centre core that supports the highest order and best use of urban land in the centre.	
Rules	**Criteria**
There is no applicable rule.	C21 Car parking in the commercial centre core achieves all of the following: a. prevalence of bulk surface car parking as a short term measure is minimised, with no surface car parking, other than on-street car parking, permitted in the longer term b. car parking is concentrated in shared and publicly accessible facilities c. the use of shared car parking and a 'park once' approach is promoted by locating adequate car parking in close proximity to key attractions (optimally within 200 m) d. opportunities for on-street car parking, integrated with street trees and streetscape design is maximised e. the natural topography is utilised to promote multi-level car parking in basements, under-crofts and podiums f. short term parking adjacent the commercial centre core and long term (commuter) parking to the periphery is encouraged g. multi-level car parking is concealed from street view and sleeved with active development frontages h. Parking and Vehicular Access General Code requirements are met.

11.2 Active frontages, arcades and servicing

Objectives	
To provide continuous active frontages to the streets and arcade networks at the retail core, and enhance an enriched pedestrian-oriented public realm. To ensure that in the commercial centre core there is an appropriate level of activation and a sense of surveillance of streets, 'big box' retail development (e.g. supermarkets and department stores) and car parking structures are sleeved by active frontages. Impacts of servicing on the streetscape are minimised, prioritising pedestrian and cycle movement and safety.	
Rules	**Criteria**
There is no applicable rule.	C22 Active primary retail street frontages in the commercial centre core are not inconsistent with the principles in Figure 16 and achieve all of the following: a. blank facades to core streets and arcades are avoided b. building fronts are oriented towards streets and arcades c. back-of-house facilities (i.e. services, car parking and loading docks) are concealed behind active uses d. buildings have largely transparent frontages e. buildings are primarily fronted by uses such as shops, restaurants, cafes, community facilities and other uses that generate much activity f. arcades are provided at indicated locations g. residential frontages at street level, other than entry foyers to multi-unit buildings, are not permitted.
There is no applicable rule.	C23 Active secondary (mixed-use retail adaptable) street frontages in the commercial centre core are not inconsistent with the principles in Figure 16 and achieve all of the following: a. building fronts are oriented towards streets to create a sense of surveillance b. street-fronting buildings can be adapted at the ground floor for new uses as market demand changes, with a floor to ceiling height that is suitable for commercial use c. retail arcades, as indicated, provide a secondary, interconnected network between major retail developments and retail streets.
There is no applicable rule	C24 Servicing in the commercial centre core is not inconsistent with the principles in Figure 16 and achieves all of the following: a. width and visual impacts on the streetscape of service access, loading areas, driveways and crossovers (where the driveway crosses the kerb) are minimised b. conflicts between car/truck and pedestrian/cyclist movement are minimised c. blank facades are avoided d. driveway access to car parking and service areas are minimised to the greatest extent possible.

Figure 16: Active frontages (primary retail and mixed retail adaptable), arcades and servicing

Artist impression illustrating the future desired character of the commercial centre core from Molonglo River Park

11.3 Special community places in the public realm

Objective	
To ensure community facilities and major attractions are located at key nodes in the public realm to become focuses of public activity and community identity in the commercial centre core.	
Rules	**Criteria**
There is no applicable rule.	C25 Special community places in the public realm of the commercial centre core in Figure 17 achieve all of the following: a. contribute to the spine of community activities located on the east-west axis of the cross street central, from the town plaza to the town park and college precinct b. contribute to the spine of community activities located on the north-south axis of: i. the main street, from the town plaza to the hill park ii. the east terrace, from the town park and college precinct and the hill park c. are co-located where possible with other community and commercial facilities to create a critical mass of activity and optimise infrastructure costs d. are physically and visually connected to key parts of the centre and surroundings, including the residential precincts (C-G), pedestrian and open space networks, and the natural setting of Molonglo River e. have a high standard of design, visual presence and user amenity f. prioritise pedestrians g. public transport and buses are close by, with important bus routes and stops servicing these places.
There is no applicable rule.	C26 Special community places in the public realm of the commercial centre core are not inconsistent with the locations in Figure 17 and the following future desired character: 1. Town plaza – main public gathering place, located at the junction of the main street and the cross street central shared zones and activated by surrounding retail/cafes/ restaurants; 'the centre of town' 2. Community centre – major hub of activity, designed as a distinctive public building that reinforces the character and activity of the town plaza; the main accommodation can be located above retail activity (e.g. podium) with a prominent foyer on street level 3. The main street and the cross street central – streets treated as shared zones, designed to promote community street life with a safe, pedestrian-friendly environment and 24-hour passive surveillance 4. Outdoor amphitheatre – important linking space, providing dramatic views and a grade transition between the commercial centre core and Molonglo River corridor; designed to meet access standards and suitable for outdoor performance with links to the adjoining community arts centre and the college (Years 11-12) auditorium 5. Town park playing field – large recreation terrace, providing an appropriate scale for an informal field for use by college students and the wider community; large enough to become a formal venue for sport and events if required 6. Community recreation irrigated park (CRIP) – space for a range of recreation facilities, accessible to both college students and the wider community; potentially including playgrounds, cricket nets, tennis courts, skate bowl, picnic facilities and an amenities block

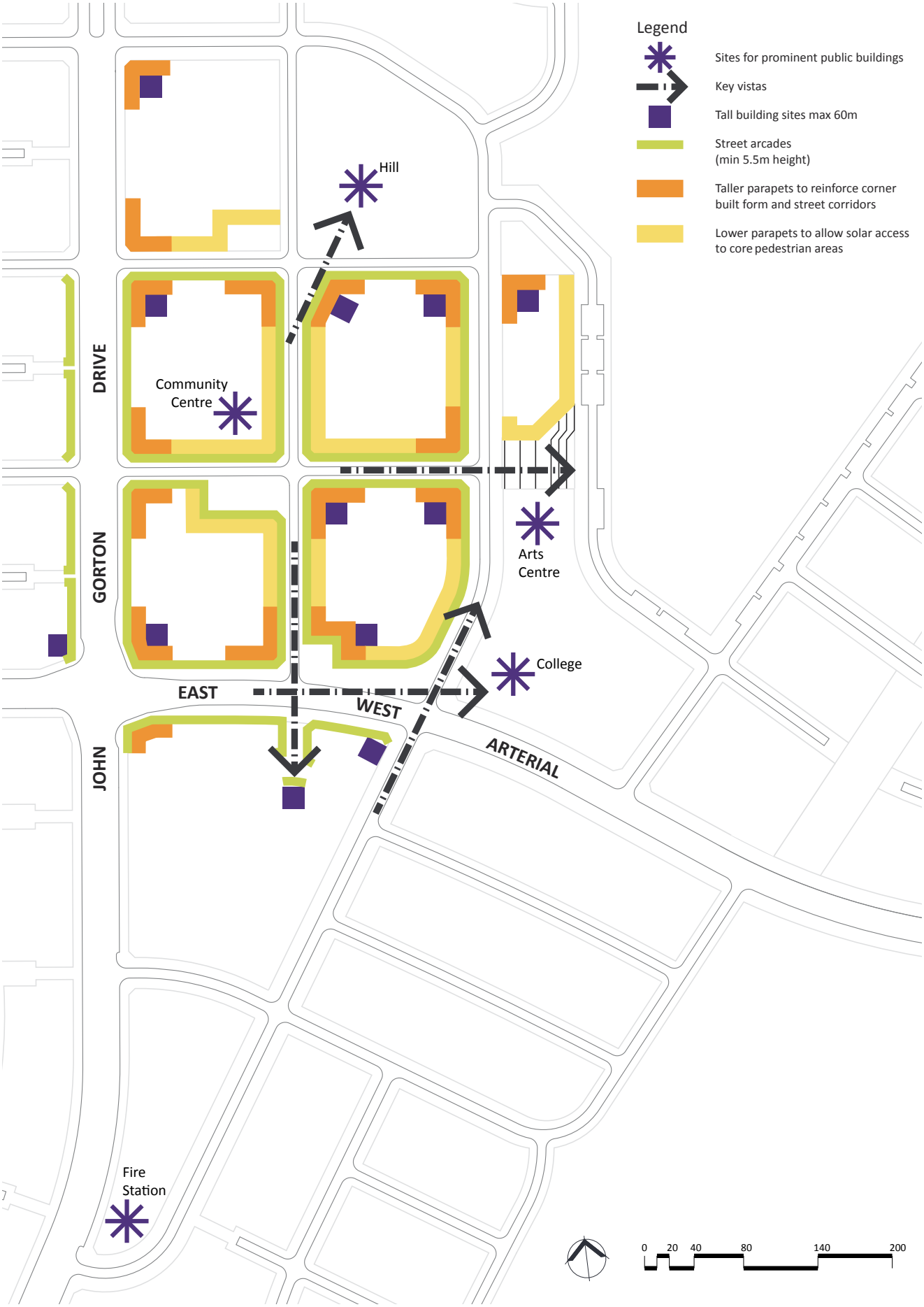
Rules	Criteria
	7. Town park pond – pond and open space, with an important urban water management function and attractive recreation and environmental resource for the town park and college precinct; adjoining trails and picnic areas overlook Molonglo River Park 8. Community arts centre – community arts node, strategically positioned to enable co-usage of college facilities by the local community and adjacent to important bus stop; contributes to community activities along the axis of the cross street central from the town plaza to the town park and outdoor amphitheatre 9. College/early childhood centre – Molonglo's major civic building complex, positioned at the prominent intersection of the east-west arterial and the east terrace and overlooking the town park; allows for a landmark architectural design 10. Transitional school/mixed-use site – transitional (primary) school, adjoining the commercial centre core and opposite the hill park, will generate extra activity in the core and utilise infrastructure in the core such as car parking; it allows for conversion to a mixed-use urban development in future 11. Hill park – park for passive recreation, adjacent to the main street and the commercial centre core, retains significant native trees and has excellent outlook from the summit; contributes to the distinctive landscape setting of Molonglo and is an important visual link to Molonglo River Park 12. East terrace promenade – broad promenade, with a double row of trees and an off-road cycle path; it is a distinctive landscape and activity corridor that frames the core 13. Gateway park – park that occupies a prominent entry point to traffic approaching the commercial centre core from the south, combined with the landmark site for emergency services 14. Fire station/Emergency services – fire station as part of the emergency services site, provides an opportunity for the design of a distinctive public building to mark a key entry to the commercial centre core 15. Service stations – sites with convenient access off major roads, and in a more car-oriented environment away from the commercial centre core to protect its urban pedestrian character; they may be located with appropriate service trades and fast food outlets 16. Homemakers/hardware area – sites suitable for early stages of development, including surface and basement public car parking and with the preferred location for a garden centre on link road north; it has strong pedestrian links to the main street 17. Main street link – attractive pedestrian link extending from the main street retail corridor into the homemakers/hardware area, to reinforce retail connectivity 18. Gateway plaza – opportunity for a plaza, with appropriate artwork, located on the corner at a key entry site to the commercial centre core.

Figure 17: Special community places in the public realm

11.4 Special building heights

Objective	
To identify and define key sites in the commercial centre core as locations for gateway and prominent buildings to enhance urban form and public realm legibility, and reinforce the character of a 'hill town' within the natural environment.	
Rules	**Criteria**
There is no applicable rule.	C27 Special building heights in the commercial centre core are not inconsistent with the principles in Figure 18 (and principles in Figure 10), and achieve all of the following: a. prominent sites and architectural treatment for public buildings are provided at key nodes in the public realm b. taller buildings respond to the street network hierarchy and are located along major streets and at significant corners and key sites c. significant views are framed to Molonglo River Park and the surrounding natural environment d. solar access and pedestrian comfort is protected in adjoining streets and public spaces.

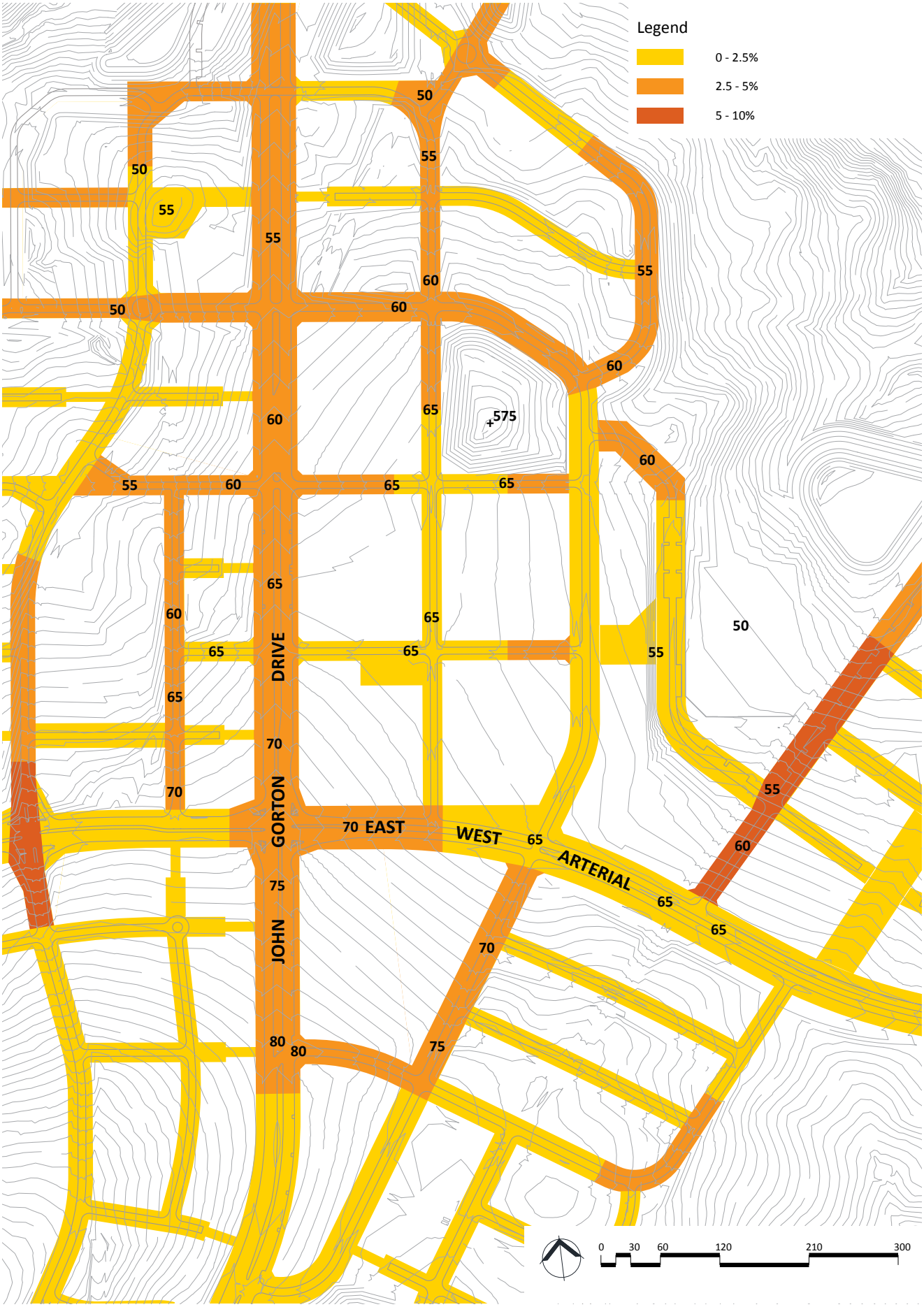
Figure 18: Special building heights



11.5 Grading and universal access

Objective	
To create a pedestrian friendly commercial centre core with acceptable grades to accommodate the needs of people of all ages and abilities.	
Rules	**Criteria**
There is no applicable rule.	C28 Grading and universal access in the commercial centre core is not inconsistent with the principles outlined in Figure 19 and achieves all of the following: a. the natural topography and drainage lines are responded to where possible b. trees are retained and protected, where applicable c. the requirements of the Disability *Discrimination Act 1992* are met d. continuous routes are provided through the commercial centre core public realm network for disability access, and 24-hour public elevators/escalators are provided e. opportunities for basement car parking are optimised f. at-grade commercial frontages are promoted g. the number of physical barriers in the public realm is minimised h. buildings are stepped to follow contours and achieve desired building heights i. retaining wall design and materials are utilised to create a consistent and distinct landscape character.

Figure 19: Grading and universal access



Artist impression illustrating the future desired character of the main street

Element D – Streetscape and development controls

12 Overarching streetscape objectives

Objectives
To recognise that streets are to provide for diverse modes of transport and are not simply conduits for cars.
To provide a safe and appropriately illuminated urban environment for all user groups.
To ensure streets have design elements that support a wide range of activities and ease of use for pedestrians, cyclists, public transport users and people of limited mobility.
To provide an urban realm where amenity is prioritised for slower users to linger and directly engage with the immediate urban environment.
To promote street design that responds to land use and the pedestrian-oriented context of the commercial centre core via carriageway widths, quality pavements and verge landscaping, street trees, on-street car parking, water management, building setbacks and the extent of public furnishings, signage and lighting.
To minimise the extent of bitumen and maximise outdoor pedestrian space.
To deliver engineering requirements through integrated services infrastructure.
To provide a public realm that optimises climatic comfort and reduces adverse impacts of sun, shade, wind and heat loads.

The location of the general height control sections (A-B) and building envelope control sections (1-13) in Element D are shown in the key plan (Figure 20).[13]

Figure 20: Key plan for general height control sections A-B and building envelope control sections 1-13

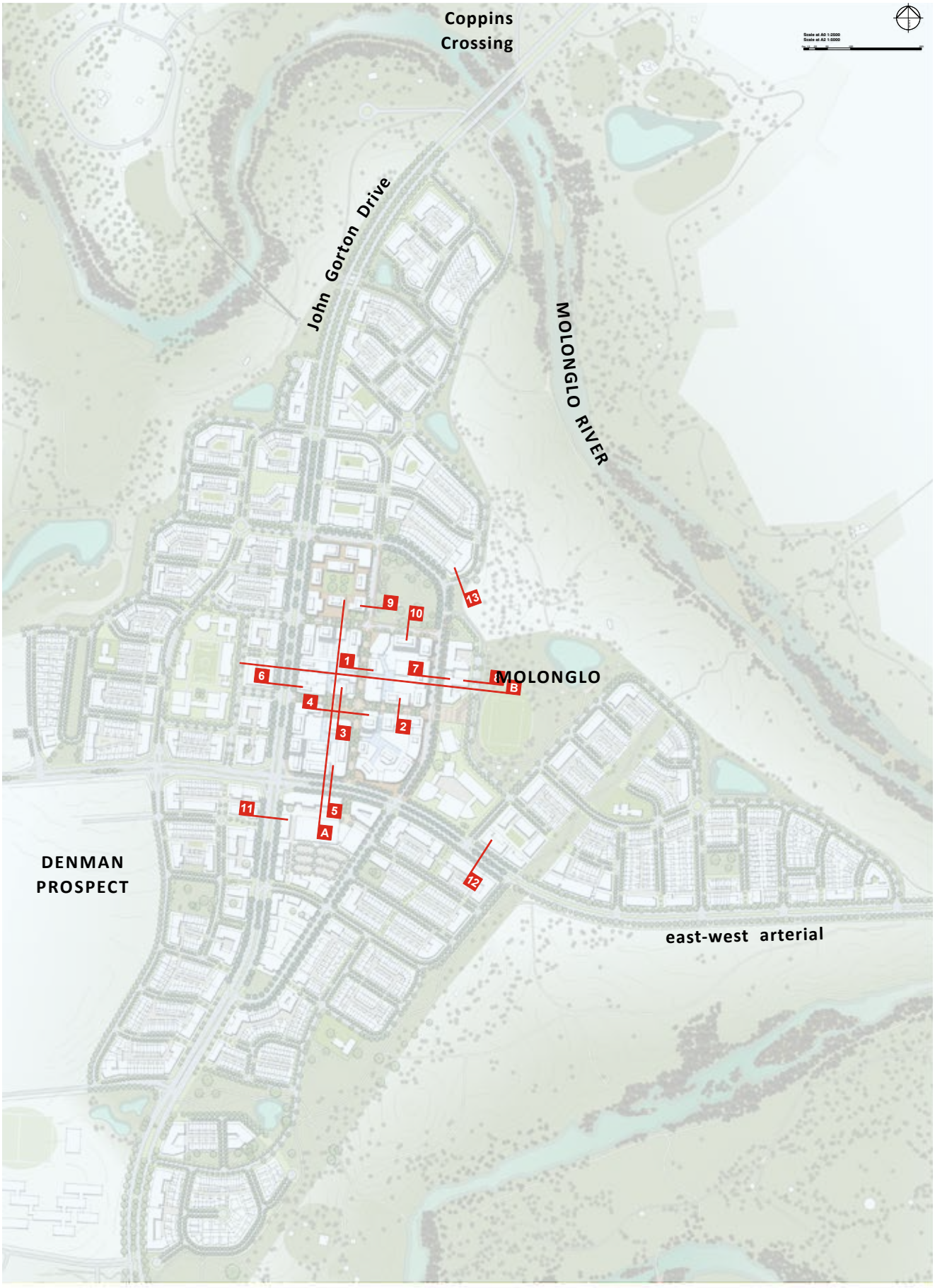


Figure 21a: General height control section A

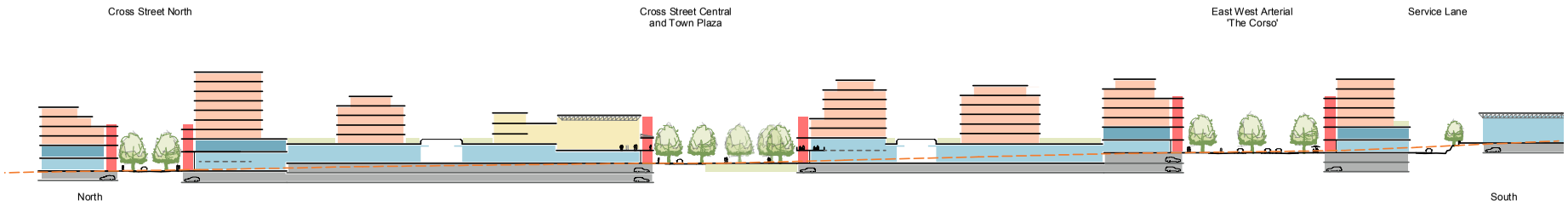


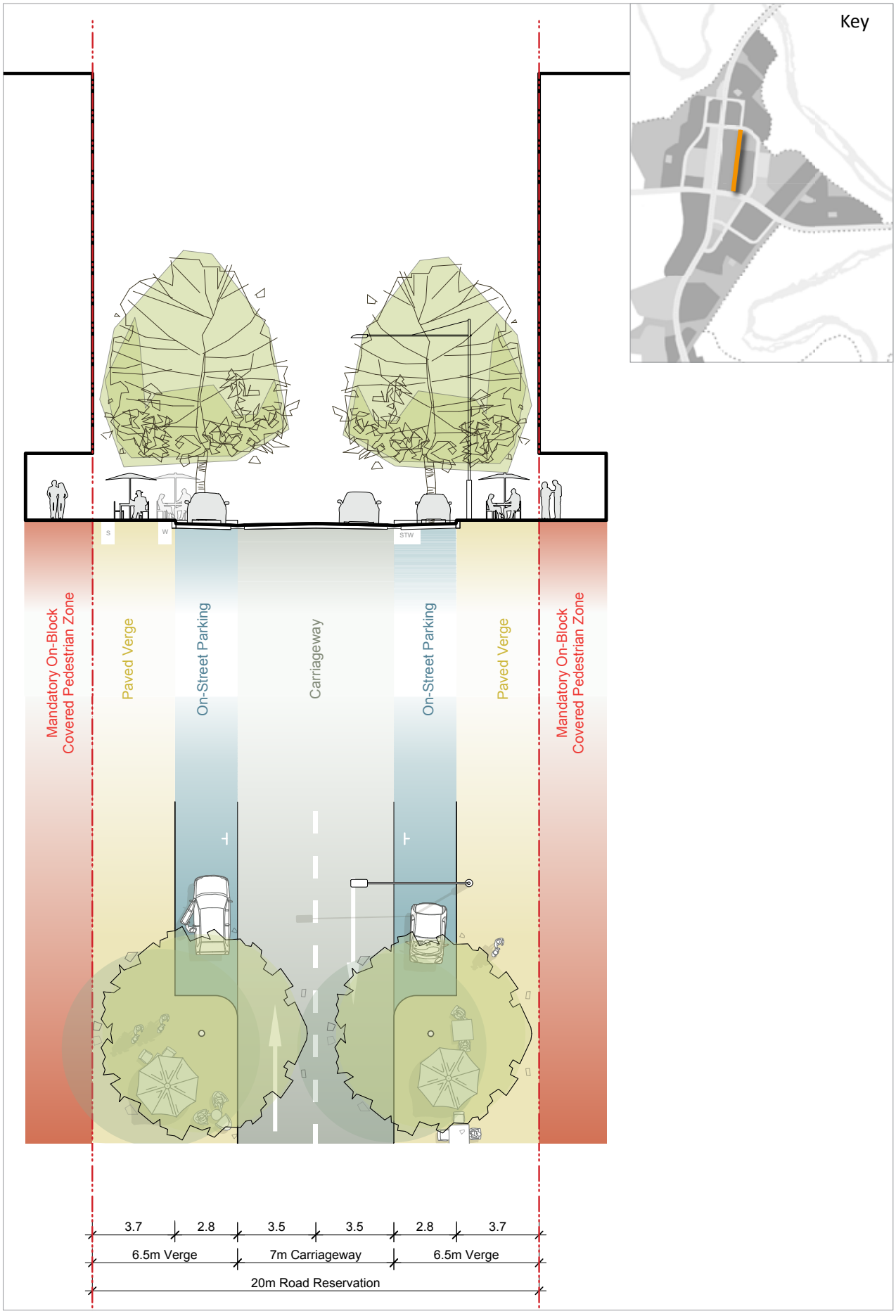
Figure 21b: General height control section B

13 Commercial centre core streets

13.1 The main street

Design intent – street	
The main street in the commercial centre core is the principal shopping street of Molonglo. This street is a shared pedestrian zone with the character of a traditional 'high street' and an active, vibrant mixed-use business strip, reinforced by slow moving traffic prioritising pedestrians.	
Rules	**Criteria**
R29 The main street is a shared zone with the dimensions in Figure 22.	C29 The main street is generally consistent with the road reservation, carriageway and verge dimensions to achieve the desired character and principles in Figure 22.
There is no applicable rule.	C30 The main street is generally consistent with the principles in Figure 22 and achieves all of the following: a. pedestrians are prioritised in this shared zone b. there is safe, slow moving vehicle access c. road carriageways are not bus capable (buses are not permitted) d. design elements support and enhance diverse commercial and mixed-use activity and alfresco dining, including high quality streetscape finishes and landscape e. continuous street trees in the verges are provided where possible (allowing access to blocks, buildings and loading docks), and other appropriate landscaping for climatic comfort and visual amenity f. pavement materials provide cues for vehicle and pedestrian behaviour and activities g. frequent and safe pedestrian crossing points are provided of minimal distance when traversed h. covered pedestrian access is provided with awnings or colonnades along building frontages i. on-street indented parallel car parking is integrated with street trees j. development facing the street is sleeved with active street frontages k. back-of-house activity (i.e. loading docks, service driveways) is concealed in mid-blocks and basements to maximise active frontages to the public domain l. 24-hour public access and passive surveillance of the public domain is encouraged m. cycling amenities such as bike racks are provided.

Figure 22: Typical street section – the main street



Design intent – adjoining built form	
The main street is a well-defined, contained, articulated, active and intimate urban space. Retail activity, buildings and building entries/exits assist to create a sense of place and an exciting, diverse and vibrant pedestrian environment at street level. At mid-block, pedestrian crossings provide continuous links via a retail arcade network between major retailers. Amenities are provided that are conducive to the expected levels of pedestrian activity at these nodes.	
Rules	**Criteria**
There is no applicable rule.	C31 The built form adjoining the main street is generally consistent with the heights, land uses and public domain controls to achieve the desired character and principles in Figure 23 and 24.
There is no applicable rule.	C32 The built form adjoining the main street is generally consistent with the principles in Figure 23 and 24 and achieves all of the following: a. a destination is provided at each end of the street b. the street is enclosed on each side by buildings that act to contain, enliven and interest c. the space is well-proportioned and defined, while allowing for varied edges and diversity to its form d. there are zero building setbacks to the street boundary to encourage interaction between the pedestrian public realm and retail and leisure uses e. continuous covered pedestrian access is provided along both sides of the street on-block with zero setback to the front boundary and minimum clear dimension 4 m wide x 5.5 m high f. primary building entries/exits are identified and highlighted as points of welcome and orientation g. the number of building entries/exits is maximised to assist in activation of streets and external spaces h. access is provided to the podium and roof-garden level of buildings for recreational and commercial use and street surveillance i. building entries/exits are clearly defined and level with adjacent external paving.

Figure 23: Building envelope control section 1 – the main street

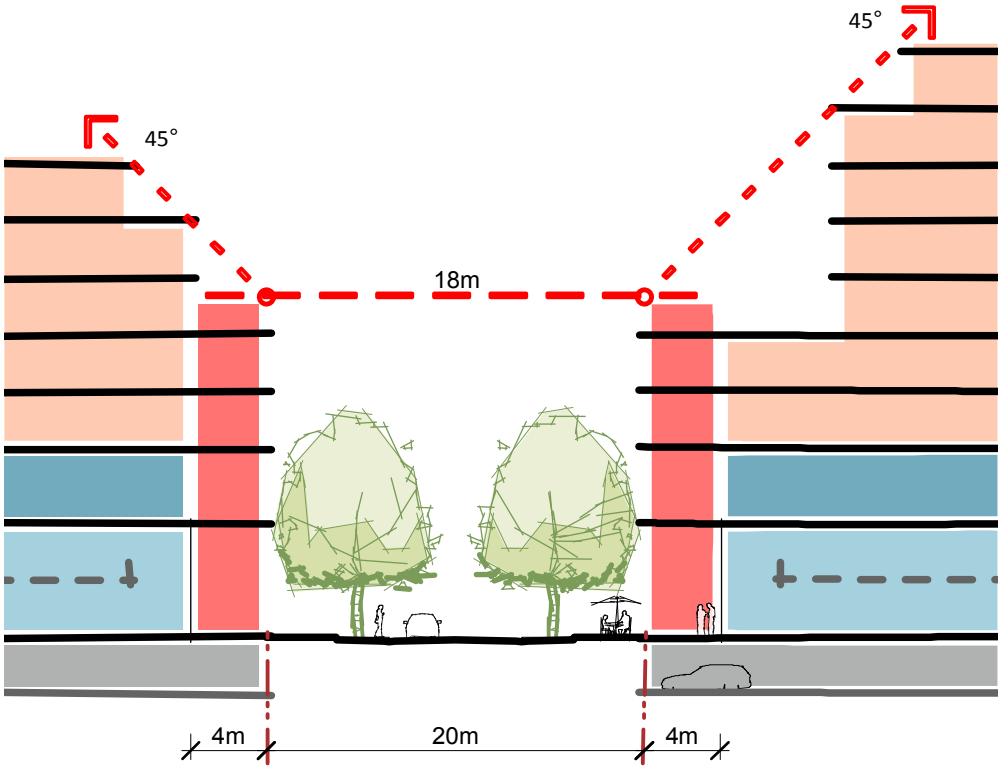
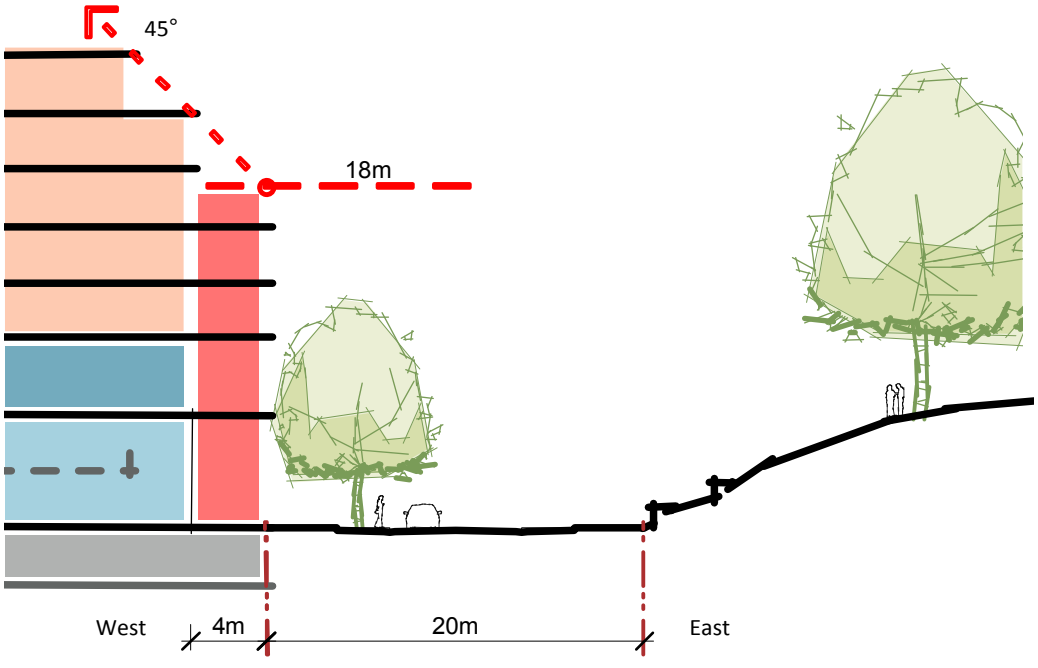


Figure 24: Building envelope control section 9 – the main street at the hill park

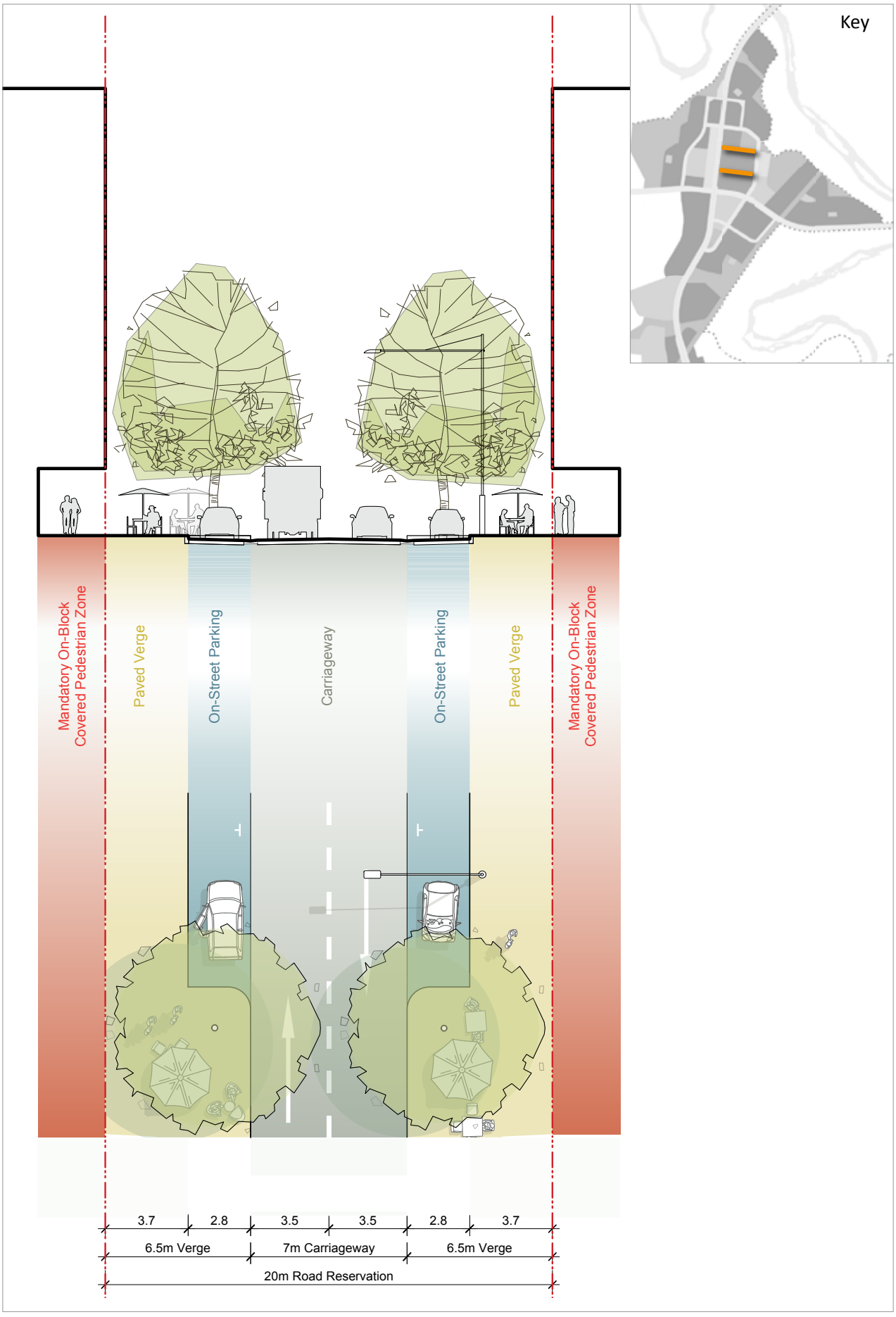


13.2 The cross streets

Design intent – street
The cross streets in the commercial centre core provide the primary vehicle and servicing access while maintaining an appropriate pedestrian character across the main street. The design of the two cross streets differs as follows: • The central cross street crosses the main street at the town plaza, and provides an efficient and attractive linear shopping strip connecting education facilities on the western side of John Gorton Drive, through the commercial centre core to education, community, cultural and recreational facilities associated with the east terrace and the town park and college precinct. The street is not bus capable. • The north cross street crosses the main street to the north of the central cross street and has bus capable road carriageways.

Rules	Criteria
R33 The cross streets are classified as Access Street A with the dimensions in Figure 25.	C33 The cross streets are generally consistent with the road reservation, carriageway and verge dimensions to achieve the desired character and principles in Figure 25.
There is no applicable rule.	C34 The cross streets are generally consistent with the principles in Figure 25 and achieve all of the following: a. pedestrians are prioritised in this shared zone b. there is safe, slow moving vehicle access c. east-west pedestrian connectivity is promoted d. design elements support and enhance diverse commercial and mixed-use activity and alfresco dining, including high quality streetscape finishes and landscape e. continuous street trees in the verges are provided where possible (allowing access to blocks, buildings and loading docks), and other appropriate landscaping for this urban centre to provide climatic comfort and amenity f. frequent and safe pedestrian crossing points of minimal distance when traversed are provided g. there is high quality public domain landscaping, furniture, lighting and finishes h. on-street indented parallel car parking is integrated with street trees i. 'big box retail'[14], loading docks, service driveways and back-of-house activity are sleeved by development to maximise active frontages to the public domain j. there is commercial and service vehicle access to the commercial centre core k. there is 24-hour public access and passive surveillance of the public domain to improve public safety l. road carriageways are bus capable (cross street north only).

Figure 25: Typical street section – the cross streets



Design intent – adjoining built form	
The cross streets link high traffic streets surrounding the commercial centre core to the slower speed, pedestrian-oriented main street. The cross streets are well-defined, contained, articulated, active and intimate spaces. Buildings and building entries/exits provide a sense of place and contribute to a varied and significant experience of the urban environment at street level. Service access and convenient vehicular access to private car parking within buildings are provided with minimal impact on the public realm.	
Rules	**Criteria**
There is no applicable rule.	C35 The built form adjoining the cross streets is generally consistent with the heights, land uses and public domain controls to achieve the desired character and principles in Figure 26 and 27.
There is no applicable rule.	C36 The built form adjoining the cross streets is generally consistent with the principles in Figure 26 and 27 and achieves all of the following: a. the space is well-proportioned and defined, while allowing for varied edges and diversity to its form b. continuous covered pedestrian access is provided along both sides of the street on-block with zero setback to the front boundary and minimum clear dimension 4 m wide x 5.5 m high c. car parking is sleeved by development and concealed from the public realm by habitable built form d. the width of vehicle entry/exit points is minimised e. no more than a single car park entry/exit within a block street frontage is permitted, with each entry/exit clearly defined and visually recessive in the built form f. service entries/exits and activities are located to minimise impacts on the public realm, with service facilities internalised within buildings g. services are not located immediately adjacent residential or commercial entry lobbies.

Figure 26: Building envelope control section 2 – the cross street central

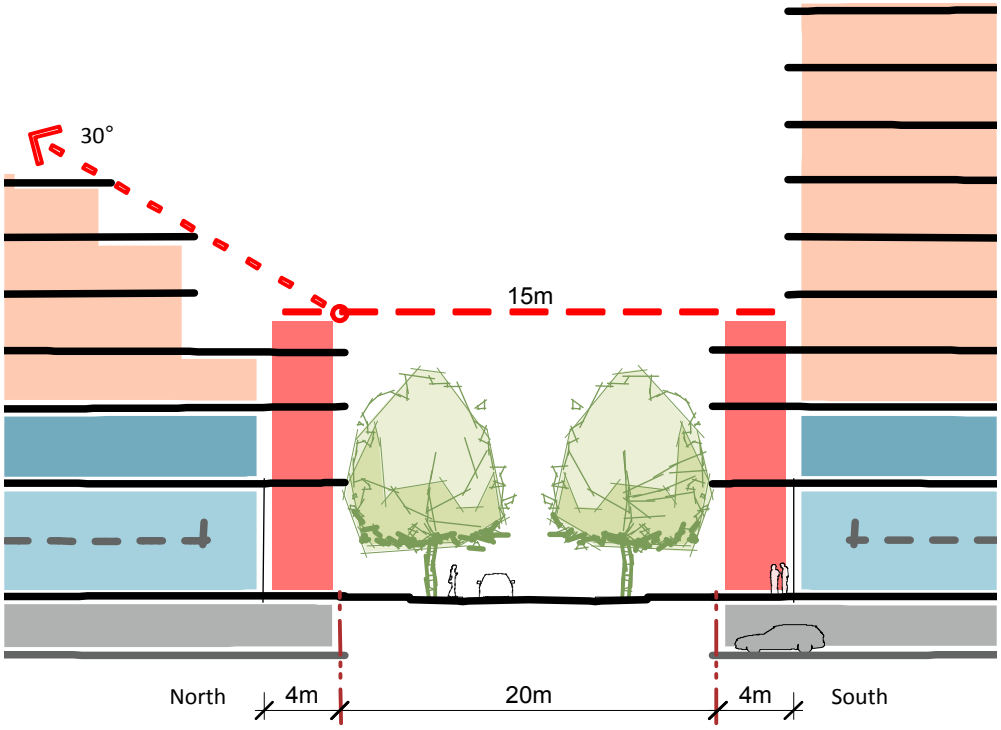


Figure 27: Building envelope control section 10 – the cross street north at the hill park

13.3 The town plaza (at the intersection of the main street and the cross street central)

Design intent – adjoining built form	
A number of urban places are to be created along the length of the main street. The largest of these is the formal town plaza that is located at the of the retail core at the intersection of the cross street central and the main street. The town plaza enhances way-finding at the centre. It is a high quality urban space that provides for community gatherings and events activity that assists in creating a vibrant pedestrian environment commensurate with the town plaza's central civic role. There will be a high degree of pedestrian access and a porous built form. Overlooking from balconies provides opportunity to survey the public open space.	
Rules	**Criteria**
There is no applicable rule.	C37 The built form adjoining the main street and cross street central at the town plaza is generally consistent with the heights, land uses and public domain controls to achieve the desired character and principles in Figure 28 and 29.
There is no applicable rule.	C38 The built form adjoining the main street and cross street central at the town plaza is generally consistent with the principles in Figure 28 and 29 and achieves all of the following: a. continuous covered pedestrian access is provided along the sides of the town plaza on-block with zero setback to the front boundary and minimum clear dimension 4 m wide x 5.5 m high b. a strong sense of enclosure is adopted with appropriate heights for perimeter buildings c. the proportion of the space (i.e. length: width: height of enclosed space) is comfortable and responds to the scale of pedestrian users d. this is a protected environment sheltered from winter and summer winds, with at least 50% of the ground plane to obtain winter sun for at least three hours of direct sunlight between the hours of 9:00am and 3:00pm on the winter solstice e. large street trees are provided for shade, shelter and protection against wind and heat impacts f. traffic is calmed through appropriate hard and soft landscape treatment g. primary building entries/exits are identified and highlighted as points of welcome and orientation h. there are more rather than fewer points of entry/exit to assist in activation of streets and external spaces, with individual entries/exits to ground floor residences where possible.

Figure 28: Building envelope control section 3 – the cross street central at the town plaza

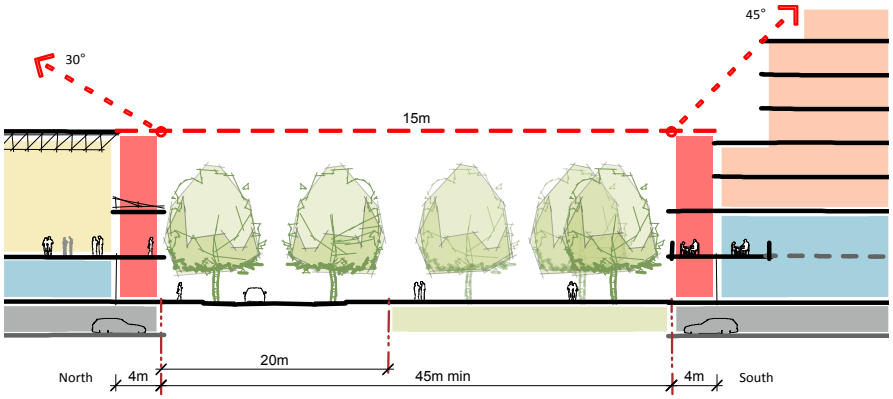
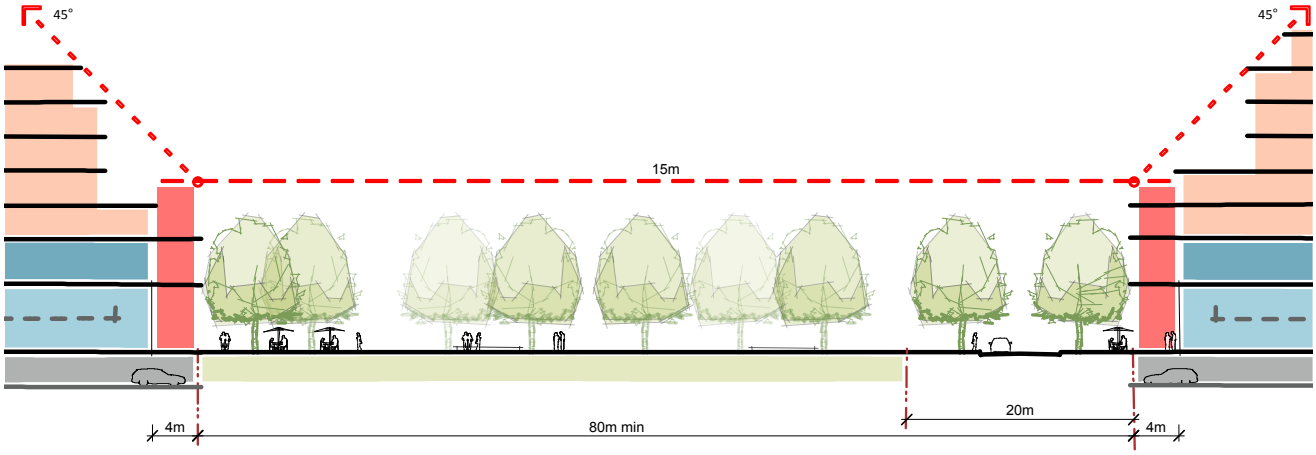


Figure 29: Building envelope control section 4 – the main street at the town plaza

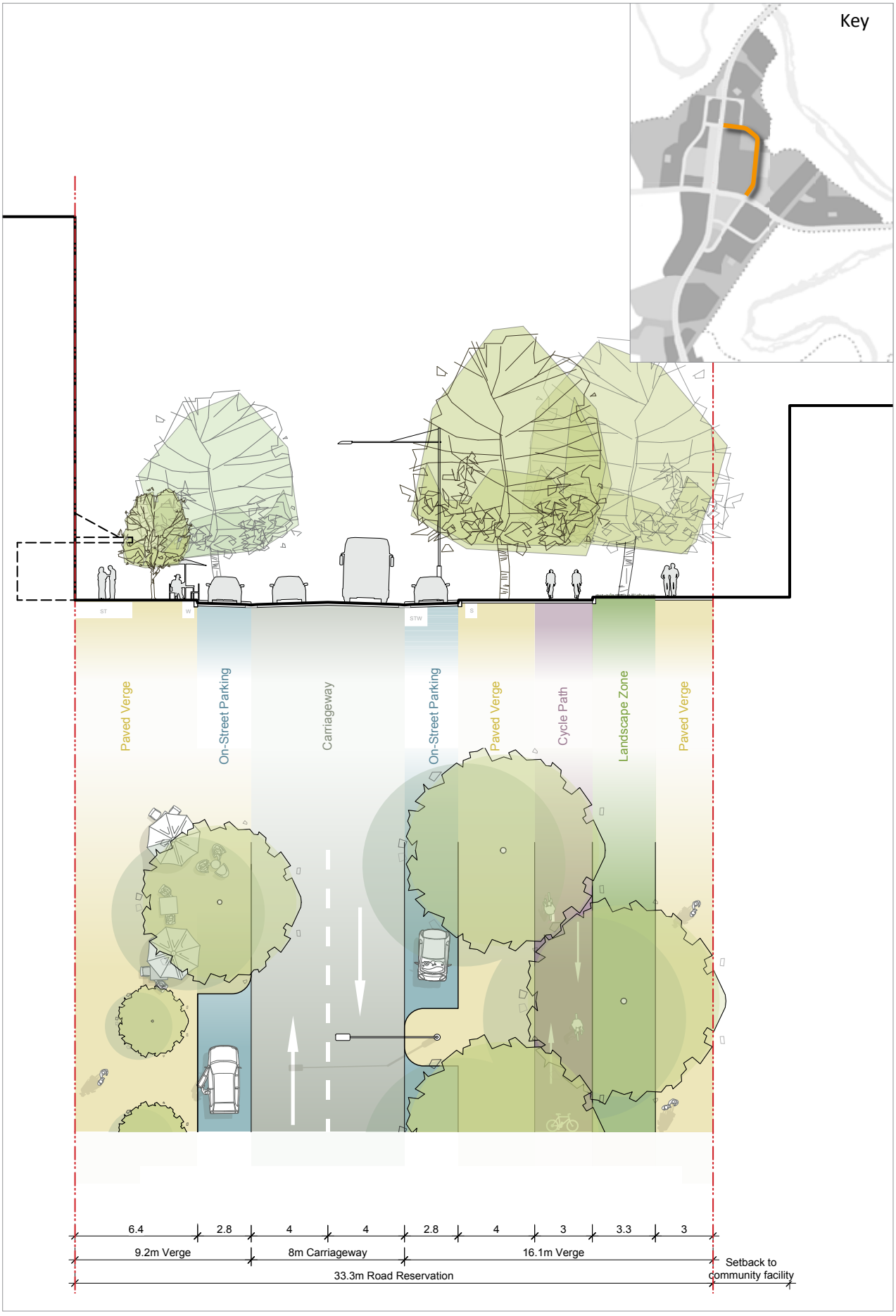


14 Commercial centre core periphery streets

14.1 The east terrace

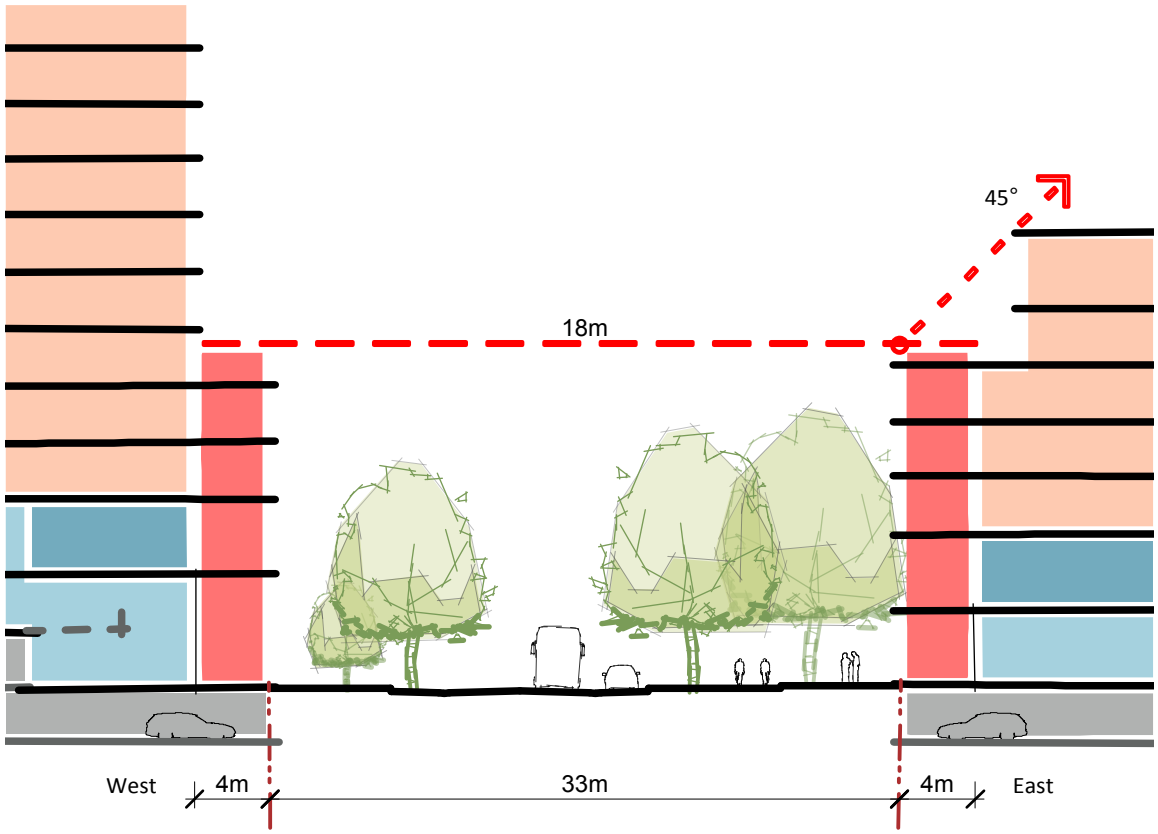
Design intent – street	
The east terrace provides an eastern address and distributor access for heavier vehicle traffic and public transport accessing the commercial centre core. The east terrace provides a broad civic pedestrian promenade and off-road cycle path, and carries the local bus route at the interface with the commercial centre core and community/education development associated with the town park and college precinct. It is a quality streetscape with a double row of canopy trees on the promenade.	
Rules	**Criteria**
R39 The east terrace is classified as a Major Collector with the dimensions in Figure 30.	C39 The east terrace is generally consistent with the road reservation, carriageway and verge dimensions to achieve the desired character and principles in Figure 30.
There is no applicable rule.	C40 The east terrace is generally consistent with the principles in Figure 30 and achieves all of the following: a. distributor access is provided for heavier vehicles and public transport servicing the commercial centre core, town park and college precinct and local schools b. a broad eastern verge accommodates a pedestrian promenade and off-road, bi-directional cycle path c. continuous large street trees are provided d. access to podium/basement public car parks and loading docks is provided, while minimising breaks in the streetscape caused by driveway crossings and service access e. road carriageways are bus capable, with Frequent Local and school bus routes f. there are regular safe pedestrian crossings from the commercial centre core to parkland, community facilities and school site in the town park and college precinct g. commercial and service vehicle access (B-double) is permitted to the commercial centre core, with minimal impact to street trees in the verge h. on-street indented car parking is integrated with street trees, street lights and services.

Figure 30: Typical street section – the east terrace



Design intent – adjoining built form	
The east terrace presents an appropriate built form address to adjacent civic land uses and Molonglo River Park. Active building frontages create an interesting, engaging and safe pedestrian environment along the street. The street provides the main access for larger service vehicles and convenient vehicular access to internalised car parking within buildings with minimal impact on the pedestrian realm.	
Rules	**Criteria**
There is no applicable rule.	C41 The built form adjoining the east terrace is generally consistent with the heights, land uses and public domain controls to achieve the desired character and principles in Figure 31.
There is no applicable rule.	C42 The built form adjoining the east terrace is generally consistent with the principles in Figure 31 and achieves all of the following: a. building elements are designed and modulated to provide a richly detailed, fine grained pedestrian experience viewed from the street b. taller buildings on the east terrace generally step down to lower buildings fronting the town park c. no more than a single car park entry/exit within a block street frontage is permitted, with each entry/exit clearly defined and visually recessive in the built form d. the width of vehicle entry/exit points is minimised e. service entries/exits and activities are located to minimise impacts on the public realm, with service facilities internalised within buildings f. basement/podium car parking is concealed from the public realm by habitable built form g. services are to have direct pedestrian access from the public street h. services are not located immediately adjacent residential or commercial entries/exits i. setbacks to public and community buildings may be provided to allow appropriate urban landscape and paving treatments.

Figure 31: Building envelope control section 7 – the east terrace at mixed-use development



14.2 The east-west arterial – the corso

Design intent – street	
The corso is the section of the east-west arterial that passes through the commercial centre core. The arterial, while having significant traffic capacity, becomes an urban boulevard characterised by large street trees and generous pedestrian environments. Street activation and pedestrian and cycle connectivity, will help form an identifiable urban 'place', particularly in the early stages of development. It is a 'front door' to the centre with a commensurate quality streetscape with business frontage to take advantage of the 'movement economy'. Following the arterial's ultimate connection to Tuggeranong Parkway, the central car parking median will be replaced with additional lanes of traffic and it will remain as a 'front door' to the commercial centre core with pedestrian and cycle activity and slow moving vehicle traffic.	
Rules	**Criteria**
R43 The east-west arterial – the corso is classified as an Urban Arterial with the dimensions in Figure 32 and 33.[15]	C43 The east-west arterial – the corso is generally consistent with the road reservation, carriageway, verge and median dimensions to achieve the desired character and principles in Figure 32 and 33.
There is no applicable rule.	C44 The east-west arterial – the corso is generally consistent with the principles in Figure 32 (interim scenario) and 33 (ultimate scenario) and achieves all of the following: a. an urban boulevard is provided that is adaptable to accommodate higher traffic demands b. visual character and pedestrian amenity is different to the east-west arterial approaches c. continuous large street trees in the verges and median are provided where possible (allowing access to blocks, buildings and loading docks) d. pedestrian footpaths are adjacent to property boundaries e. there are colonnades on-block, or awnings above public pedestrian footpaths f. active business address for alfresco dining to activate the street is encouraged g. designated pedestrian crossings are provided h. on-road cycle lanes (one in each direction) are provided i. road carriageways are bus capable, with Frequent Rapid and local bus routes j. on-street parallel car parking is integrated with street lights and services k. interim and ultimate traffic demand scenarios can be accommodated as follows: i. interim scenario – a two lane road (one lane each way) with on-street car parking; high quality median with perpendicular car parking and space for future road widening; and a 40 km/hour speed limit applies ii. ultimate scenario – a four lane road (two lanes each way) with perpendicular car parking (i.e. the median is removed and alterations to the outer verges are minimised); and a 50 km/hour speed limit applies.

Figure 32: Typical street section – the east-west arterial – the corso (interim scenario)

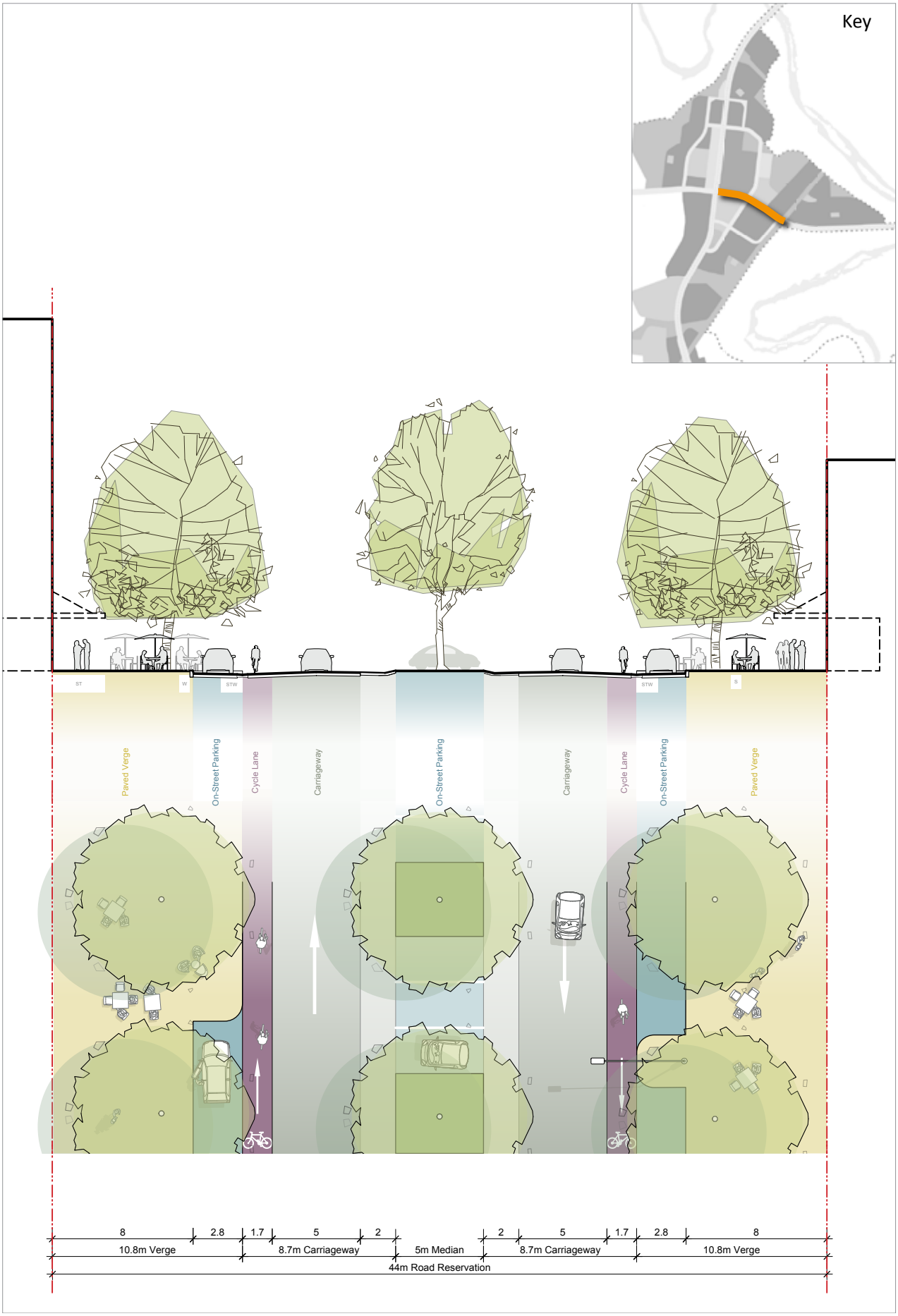
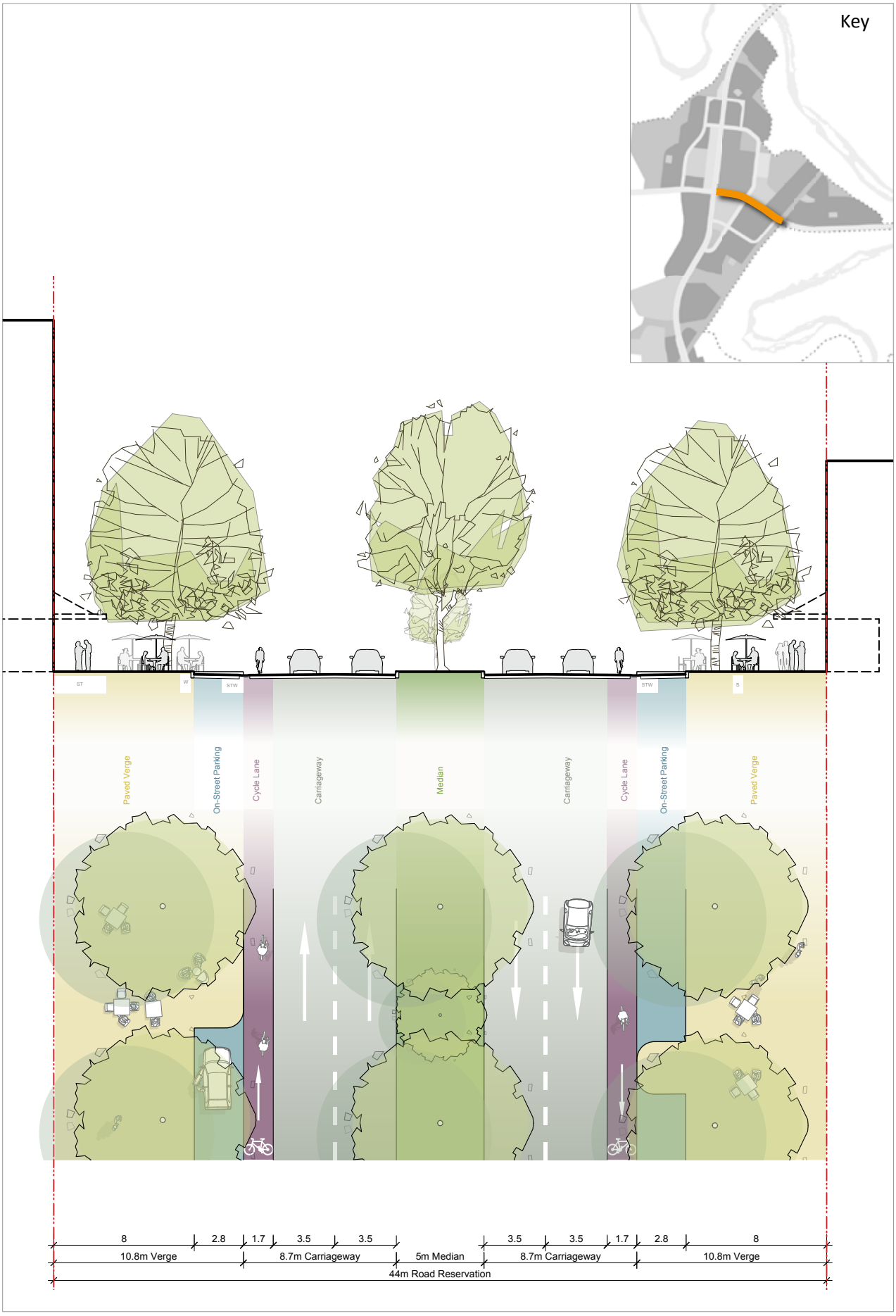
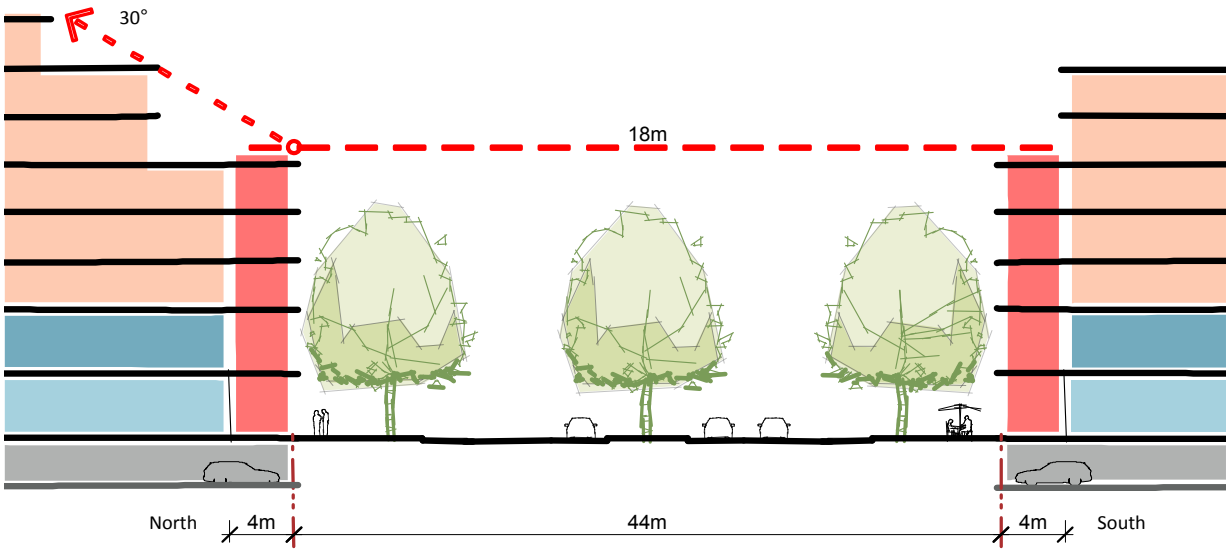


Figure 33: Typical street section – the east-west arterial – the corso (ultimate scenario)



Design intent – adjoining built form	
The east-west arterial – the corso provides active frontage in the early stages of the centre prior to development of the main street to assist in the creation of an exciting, diverse and vibrant urban environment. It provides a built form that is of scale and quality to signify arrival at the commercial centre core.	
Rules	**Criteria**
There is no applicable rule.	C45 The built form adjoining the east-west arterial – the corso is generally consistent with the heights, land uses and public domain controls to achieve the desired character and principles in Figure 34.
There is no applicable rule.	C46 The built form adjoining the east-west arterial – the corso is generally consistent with the principles in Figure 34 and achieves all of the following: a. continuous covered pedestrian access is provided along both sides of the street on-block with zero setback to the front boundary and minimum clear dimension 4 m wide x 5.5 m high b. primary building entries/exits are identified and accentuated as a point of welcome and orientation c. built form is of a scale that frames and defines the street, is well-proportioned, and designed and modulated to enrich the pedestrian experience on the street d. buildings have zero setbacks to the street boundary along commercial streets to encourage interactivity between the pedestrian realm and retail uses e. the number of building entries/exits is maximised to assist in activation of streets and external spaces f. on-block car parking is concealed from the public realm by habitable built form g. building entries/exits are clearly defined and level with adjacent external paving.

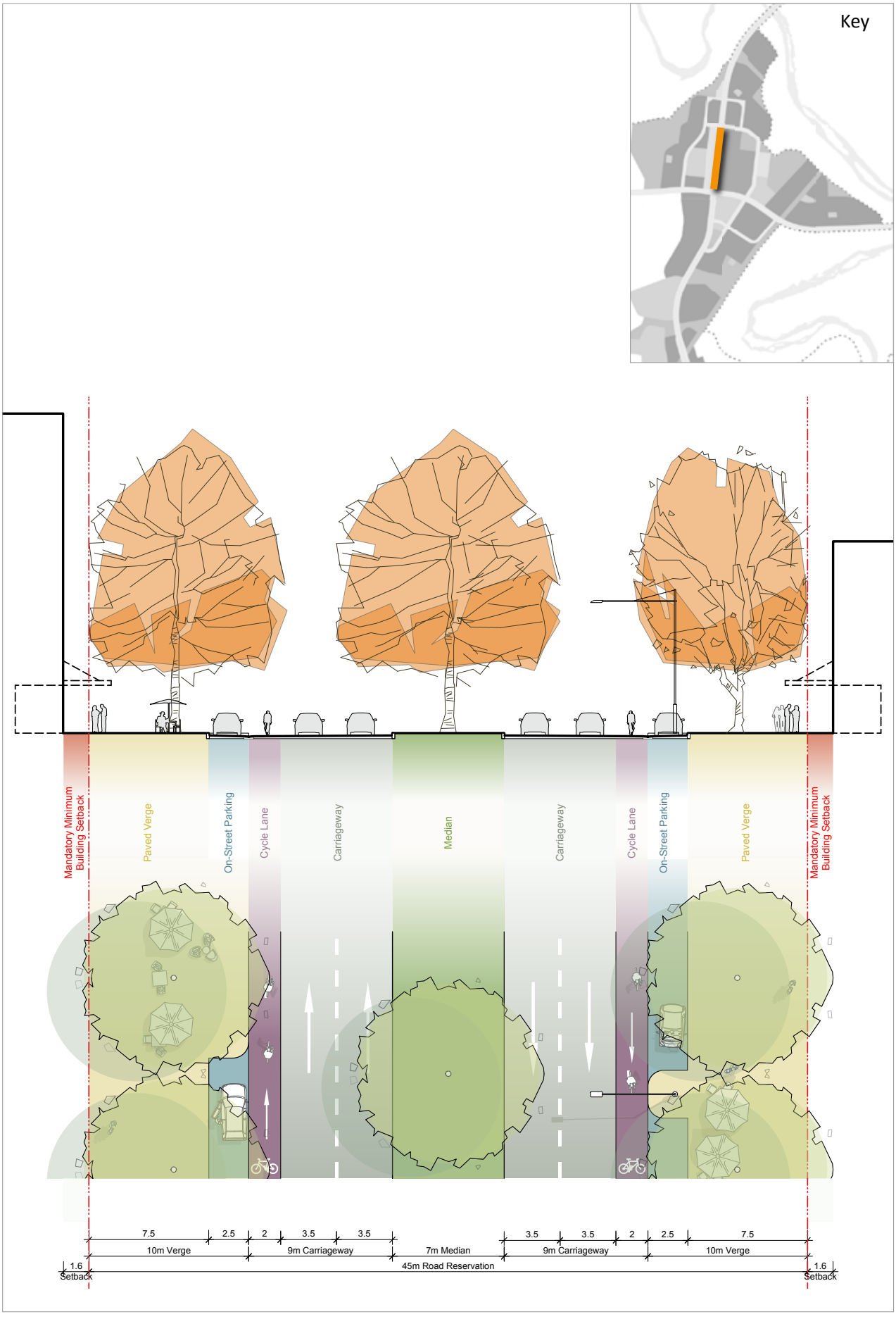
Figure 34: Building envelope control section 5 – the east-west arterial – the corso



14.3 John Gorton Drive at the commercial centre core

Design intent – street	
John Gorton Drive is the primary north-south transport spine of Molonglo Valley. The section of John Gorton Drive that passes through the commercial centre core is an urban boulevard incorporating large scale trees, on-street car parking and business address with exposure to passing traffic (the 'movement economy'). Through the core, the verges have high quality public domain design with address frontage for mixed-use buildings. The commercial centre core is 'announced to passing traffic with taller buildings, a change to a higher streetscape quality and business/retail frontage.	
Rules	**Criteria**
R47 John Gorton Drive at the commercial centre core is classified as an Urban Arterial with the dimensions in Figure 35.	R47 John Gorton Drive at the commercial centre core is generally consistent with the road reservation, carriageways, verges and median dimensions to achieve the desired character and principles in Figure 35.
There is no applicable rule.	C48 John Gorton Drive at the commercial centre core is generally consistent with the principles in Figure 35 and achieves all of the following: a. an urban boulevard is provided with high quality street trees, paving, street furniture, signage and lighting b. continuous large street trees in the verges and median are provided where possible (allowing access to blocks, buildings and loading docks), with appropriate setbacks to the building line c. safe signalised pedestrian crossings to and from the commercial centre core are provided to reduce the barrier effect of the large roadway d. there is a mixed-use business address e. a suite of design elements is facilitated that promotes the street as being part of the commercial centre core and encourages pedestrian activity in the public domain f. on-road cycle lanes (one in each direction) and cycle parking amenities are integrated with public transport (i.e. near the rapid/local connection) g. road carriageways have capacity to be bus capable, with a Frequent Rapid bus route and a potential future light rail corridor h. on-street indented parallel car parking is provided.

Figure 35: Typical street section – John Gorton Drive at the commercial centre core



Design intent – adjoining built form	
John Gorton Drive at the commercial centre core provides a built form that is of scale and quality that signifies arrival at the core, frames the space and contributes to public realm activity within the centre. Retail activity assists in the creation of an exciting and diverse urban environment. Pedestrian crossing points are enhanced with high quality urban landscaping and the provision of amenities.	
Rules	**Criteria**
There is no applicable rule.	C49 The built form adjoining John Gorton Drive at the commercial centre core and at the homemakers/hardware area is generally consistent with the heights, land uses and public domain controls to achieve the desired character and principles in Figure 36 and 37, respectively.
There is no applicable rule.	C50 The built form adjoining John Gorton Drive at the commercial centre core is generally consistent with the principles in Figure 36 and achieves all of the following: a. buildings are set back 1.5 m from the road reserve boundary to provide additional roof zone (including roof barriers) for large trees b. continuous covered pedestrian access is provided along both sides of the street on-block with minimum clear dimension 4 m wide x 5.5 m high c. basement and podium car parking is concealed from the public realm by habitable built form, and has direct access from the public street d. primary building entries/exits are accentuated in the streetscape as a point of welcome and orientation e. active retail frontages provide activity and visual interest to the pedestrian realm f. the number of building entries/exits is maximised to assist in activation of streets and external spaces g. building entries/exits are clearly defined and level with adjacent external paving.
There is no applicable rule.	C51 The built form adjoining John Gorton Drive approaching the commercial centre core, and adjacent to the homemakers/hardware area and residential precinct G, is generally consistent with the principles in Figure 37, and achieves all of the following: a. there is quality landscape treatment to the embankment on the western side and a public pedestrian path with access from John Gorton Drive to development frontage on top of the bank at maximum 3% gradient b. residential frontages in residential precinct G on the western side have generally wide set backs from the road reserve boundary to provide for front gardens, courtyards and primary entrances c. commercial frontages in the homemakers/hardware area on the eastern side are set back generally 4 m from the road reserve boundary.

Figure 36: Building envelope control section 6 – John Gorton Drive at the commercial centre core

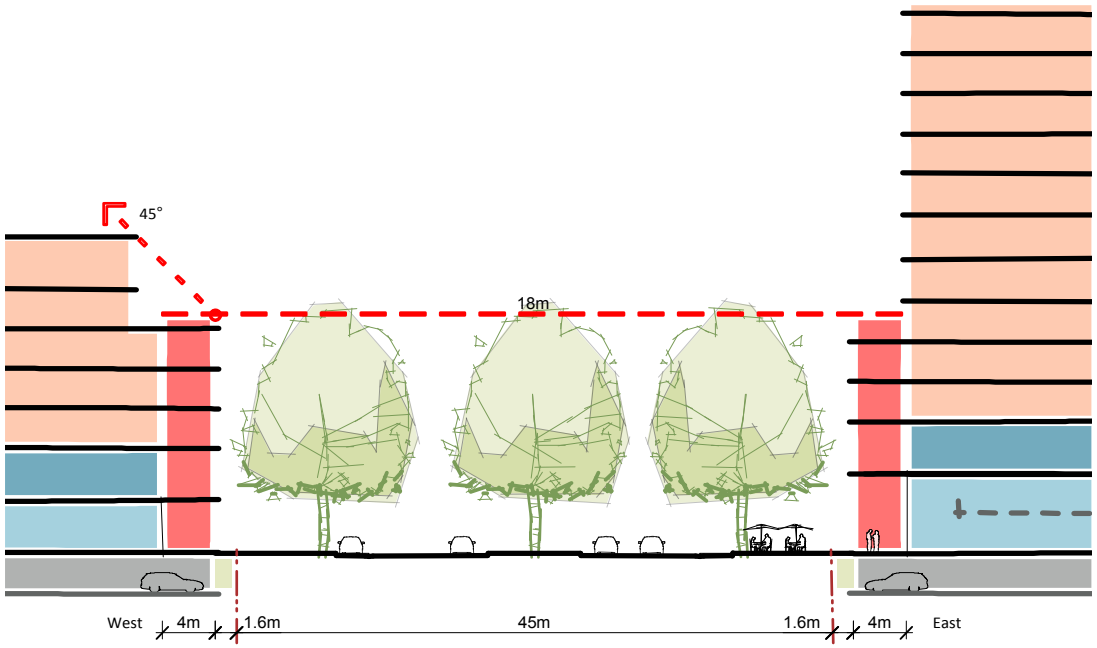


Figure 37: Building envelope control section 11 – John Gorton Drive at the homemakers/hardware area and residential precinct G

14.4 The link road

Design intent – street	
The link road is a primary route giving access to shopping, employment and education destinations in the commercial centre core. The north section of the link road enables appropriate street interface between the mixed use homemakers/hardware area on the west and the residential neighbourhood (residential precinct C) on the east. It will carry the Frequent Local bus route. The link road changes character to respond to the variance of traffic demand between the north and south section of the street. The link road continues the east terrace streetscape character, with uninterrupted large street trees, public transport and an off-road bi-directional cycle lane in the eastern verge, providing continuity with the east terrace promenade.	
Rules	**Criteria**
R52 The north section of the link road is classified as a Major Collector with the dimensions in Figure 38, and the south section of link road is classified as a Minor Collector with the dimensions in Figure 39.	C52 The link road (north and south section) is generally consistent with the road reservation, carriageway and verge dimensions to achieve the desired character and principles in Figure 38 and 39, respectively.
There is no applicable rule.	C53 The link road (north and south section) is generally consistent with the principles in Figure 38 and 39 and achieves all of the following: a. an important route is provided for traffic access to shops, schools and business destinations in the commercial centre core b. an alternative traffic route is provided between arterial roads carrying a share of traffic flow around the commercial centre core c. there is a change of street capacity and character between the north and south section of the street to respond to the variance of traffic demand d. there is appropriate street frontage and access to bulky goods commercial land uses such as in the homemakers/hardware area, and address frontage to high density residential development e. to signify the transition to the mixed-use urban village environment of the commercial centre and environs, and to facilitate an appropriate balance between through-traffic and local street activity, a high quality streetscape character is provided with continuous large street trees, quality verge treatments and frequent, safe pedestrian crossings f. no driveway access is permitted to high density residential land east of the road carriageway to achieve an uninterrupted boulevard of street trees and cycle and pedestrian paths g. a key local public transport route is provided to service commercial/ community uses at the commercial centre core h. an off-road bi-directional cycle path and pedestrian shared path in the eastern verge continues from the commercial centre core on the east terrace and interfaces with the residential frontages i. road carriageways are bus capable, with bus priority intersections for Frequent Local bus routes j. the central median accommodates vehicle right turning lanes and pedestrian crossing points.

Figure 38: Typical street section – the link road north

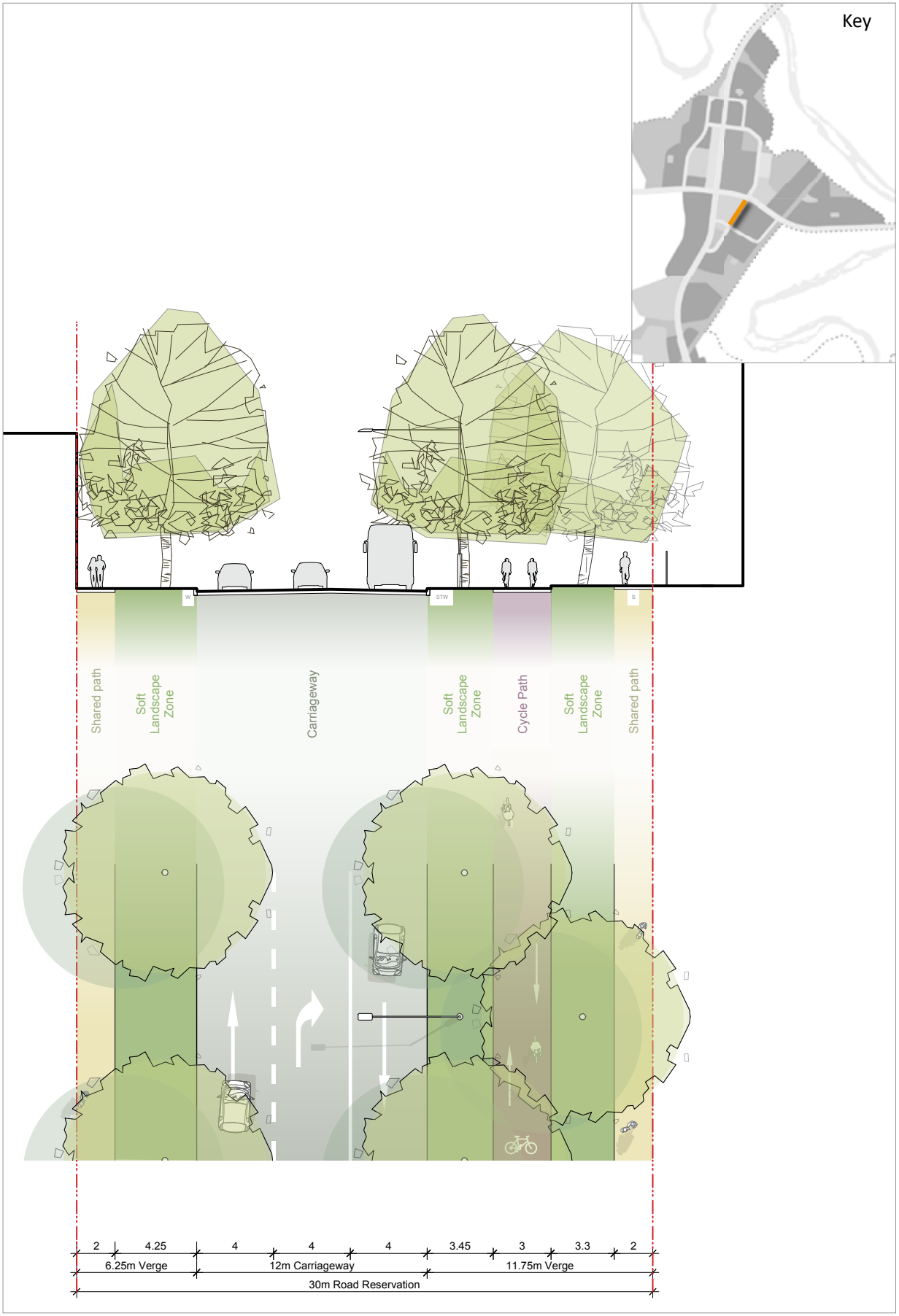
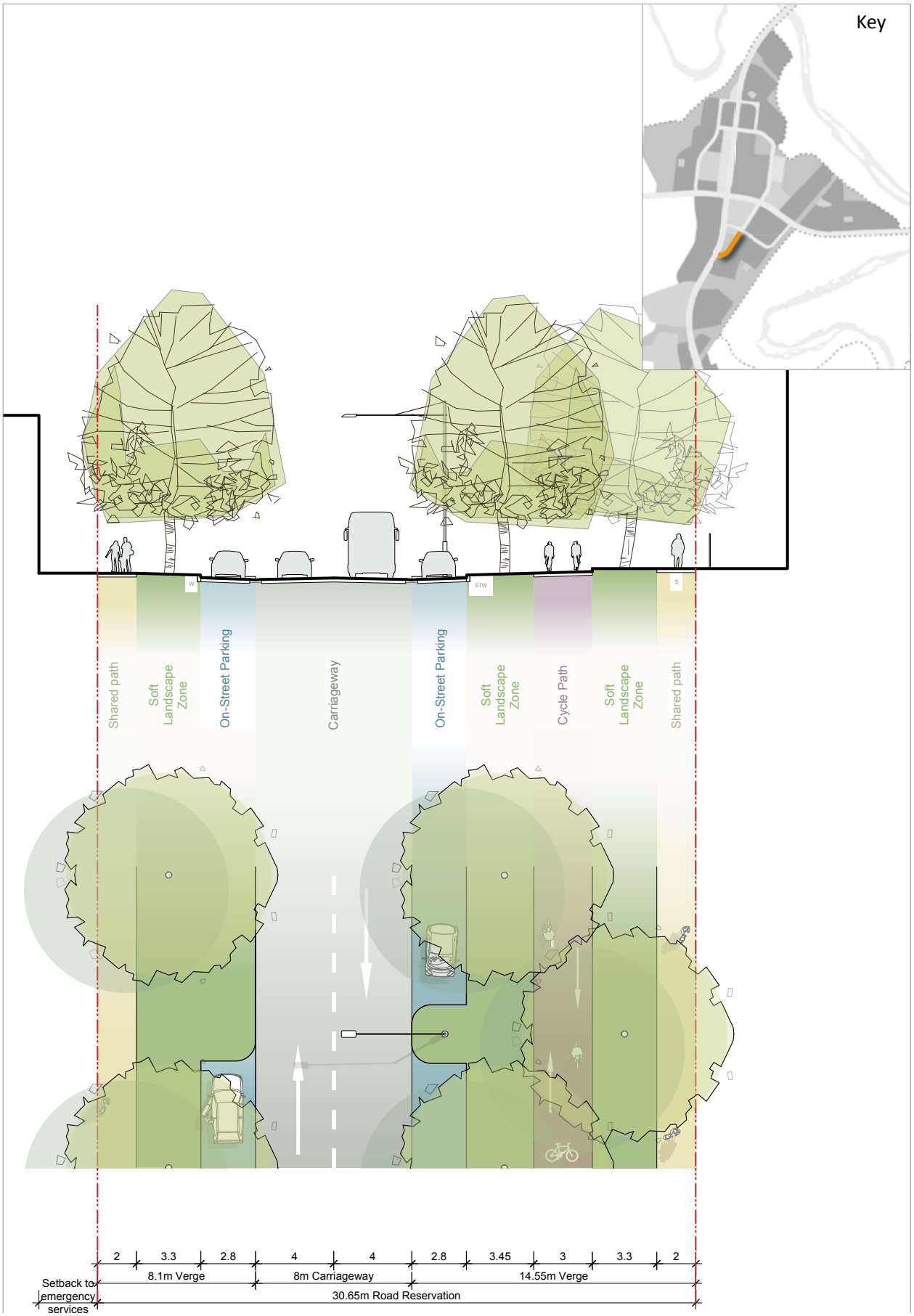


Figure 39: Typical street section – the link road south

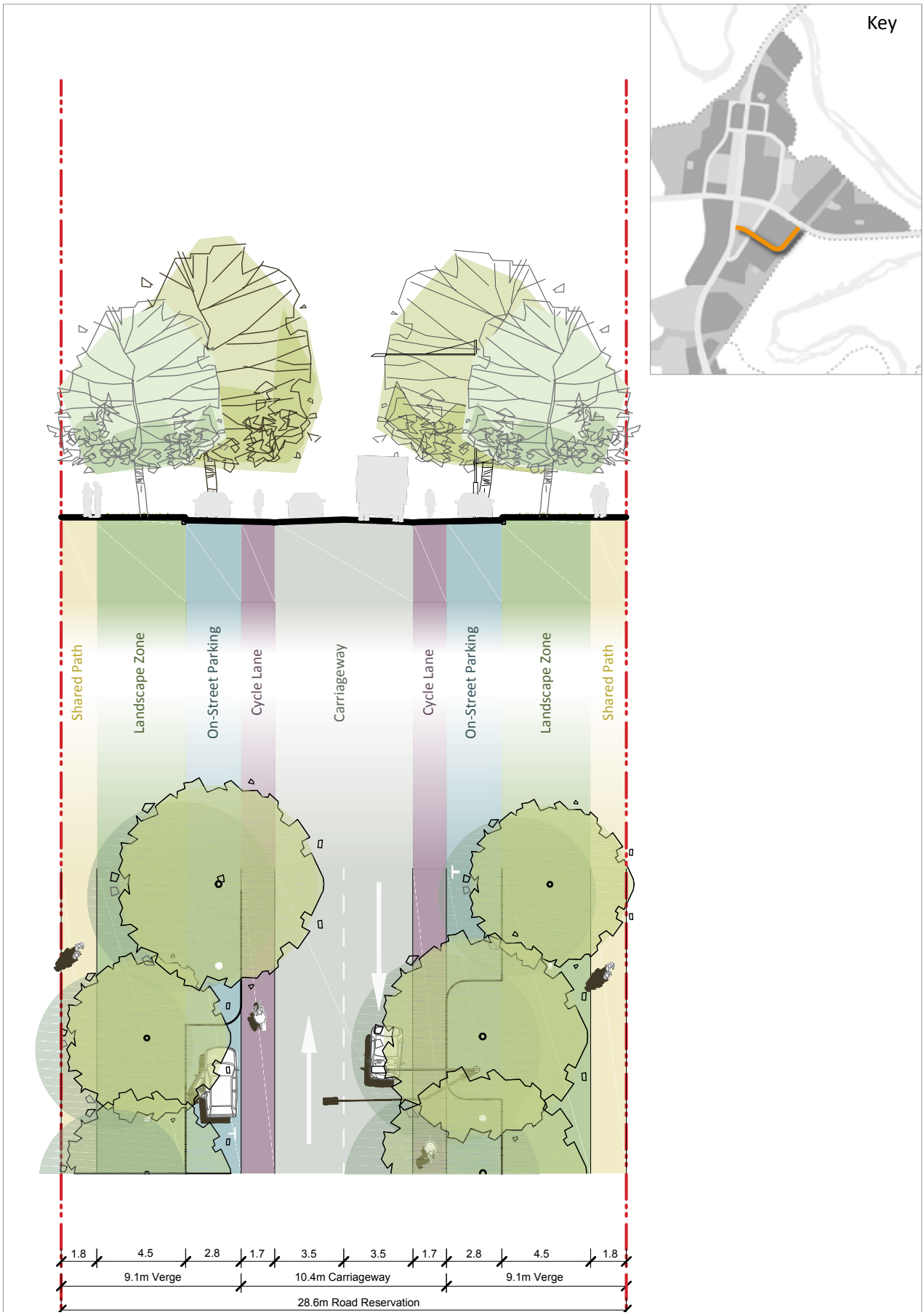


Artist impression - aerial view of study area looking west towards Brindabella Mountains

14.5 The east link

Design intent – street	
The east link is an alternative east-west route to assist in alleviating through-traffic along the east-west arterial – the corso (which will significantly increase following connection of the east-west arterial to Tuggeranong Parkway). The east link will also provide an urban function as it serves commercial land off John Gorton Drive as well as medium and high density residential land close to the east-west arterial connection.	
Rules	**Criteria**
R54 The east link is classified as a Major Collector with the dimensions in Figure 40.	C54 The east link is generally consistent with the road reservation, carriageway and verge dimensions to achieve the desired character and principles in Figure 40.
There is no applicable rule.	C55 The east link is generally consistent with the principles in Figure 40 and achieves all of the following: a. appropriate street frontage is provided with access to commercial and bulky good sites and an address to residential development b. continuous street trees in the verges are provided where possible (allowing access to blocks, buildings and loading docks) c. an on-road bi-directional cycle lane is provided d. there are generous pedestrian footpath environments e. there is access for potential service stations and fast food outlets, adjacent to the homemakers/hardware area.

Figure 40: Typical street section – the east link

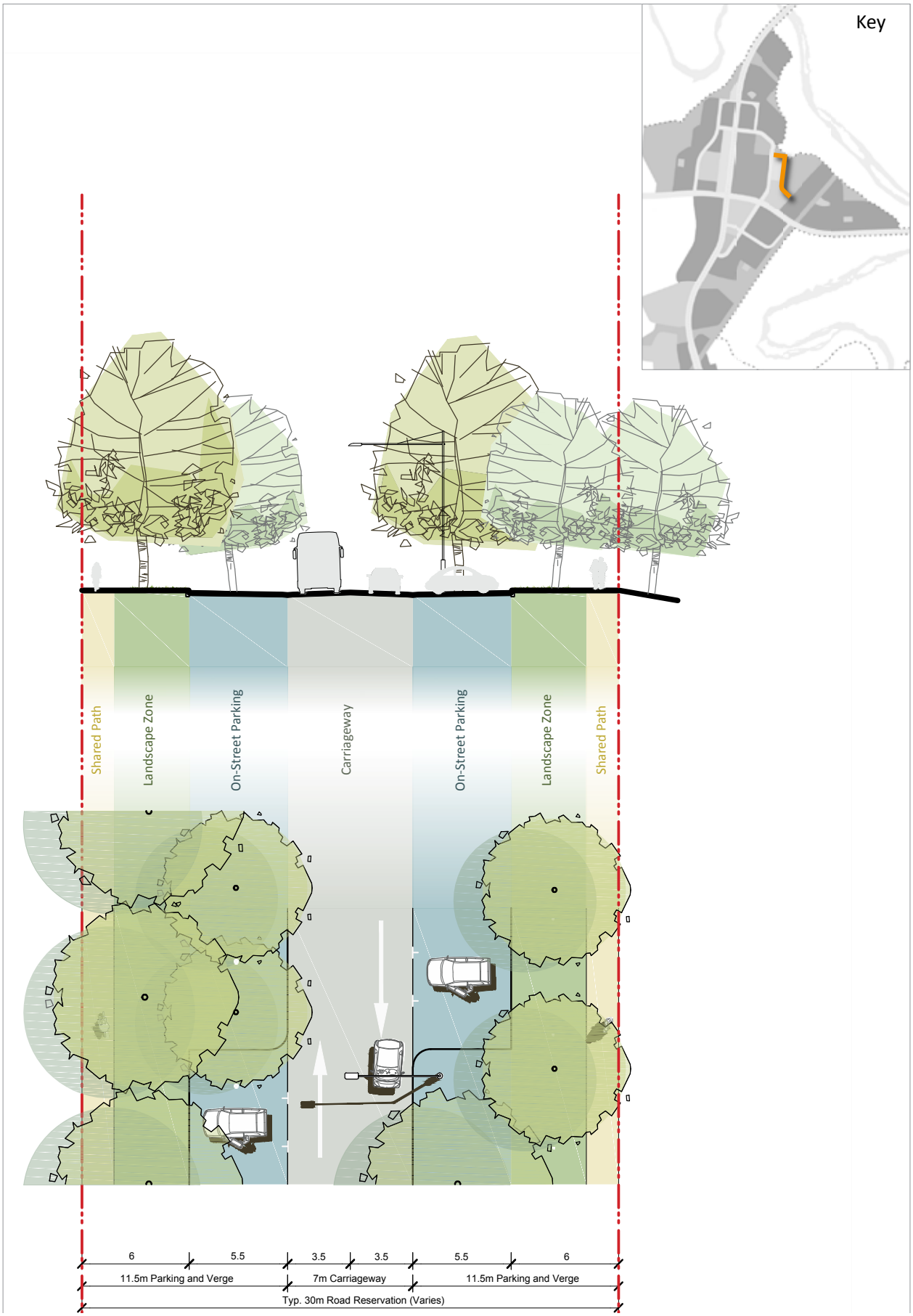


14.6 The park terrace

Design intent – street
The park terrace is a shared zone parking street, creating an important interface between the commercial centre core and the town park, and serving residential, recreation and education activities associated with the town park and college precinct. The park terrace will have local traffic calming to manage through-traffic or 'rat running'. Passive surveillance of the parkland and Molonglo River Park promenade are also key functions of the park terrace.

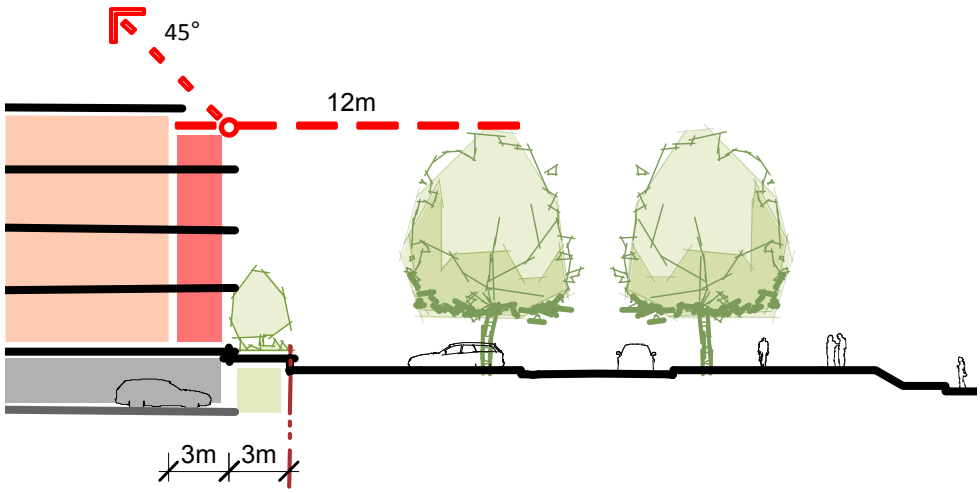
Rules	Criteria
R56 The park terrace is classified as a Shared Zone with the dimensions in Figure 41.	C56 The park terrace is generally consistent with the road reservation, carriageway, car parking and verge dimensions to achieve the desired character and principles in Figure 41.
There is no applicable rule.	C57 The park terrace is generally consistent with the principles in Figure 41 and achieves all of the following: a. perpendicular car parking in both verges is provided b. there are regularly spaced large street trees in broad planting beds between car parking bays to create a character appropriate to the town park, where landscape and pedestrian amenity dominate the streetscape c. there are generous pedestrian environments, including a shared path on both sides of the perpendicular car parking bays d. residential development with primary address, entrances and gardens (generally 3-4 m) fronts the town park e. basement car parking and vehicle access for community and mixed-use development is integrated along the western edge f. traffic calming measures are provided to slow traffic and discourage through-traffic g. a two lane road (one lane in each direction) is provided h. appropriate street pavement materials, furnishings and landscaping are provided to encourage street activation and safe movement for pedestrians, cyclists and motorists in a shared zone.

Figure 41: Typical street section – the park terrace



Design intent – adjoining built form	
The park terrace moderates the scale of the built form between the commercial centre core and the landscape setting of the town park and college precinct with intermediate, medium scale development. Safe and engaging public spaces are created with public lighting, passive surveillance and activity. Views and vistas of parkland and open spaces are maximised. Breaks in the built form provide for shared paths for all local residential streets that connect through to surrounding parks, open space networks and community facilities. Buildings are designed to allow passive surveillance of the street below and adjacent public parkland, whilst preserving the privacy of residents. Gardens and green frontages are incorporated in residential development to enhance parkland address. The centre piece of the town park and college precinct is the terraced plaza and outdoor amphitheatre, with dramatic views from the commercial centre core to Molonglo River Park gorge.	
Rules	**Criteria**
There is no applicable rule.	C58 The built form adjoining the park terrace is generally consistent with the heights, land uses and public domain controls to achieve the desired character and principles in Figure 42.
There is no applicable rule.	C59 The built form adjoining the park terrace is generally consistent with the principles in Figure 42 and achieves all of the following: a. the balance between view opportunities, solar orientation, privacy, and sunlight access to streets and other external spaces is optimised b. residential development with primary address, entrances and gardens (generally 3-4 m) fronts the town park c. there are opportunities for passive surveillance from daytime living areas of residential units and upper floor levels of buildings over adjoining public spaces d. at lower levels of residential buildings, level changes between floors and adjoining external spaces is utilised to provide privacy whilst allowing passive surveillance of public spaces e. concealed spaces that are not overlooked from adjacent development are avoided f. college and community buildings and uses positively address and contribute to public activity in the town park and the outdoor amphitheatre g. building entries/exits are clearly defined and level with adjacent external paving.

Figure 42: Building envelope control section 8 – the park terrace

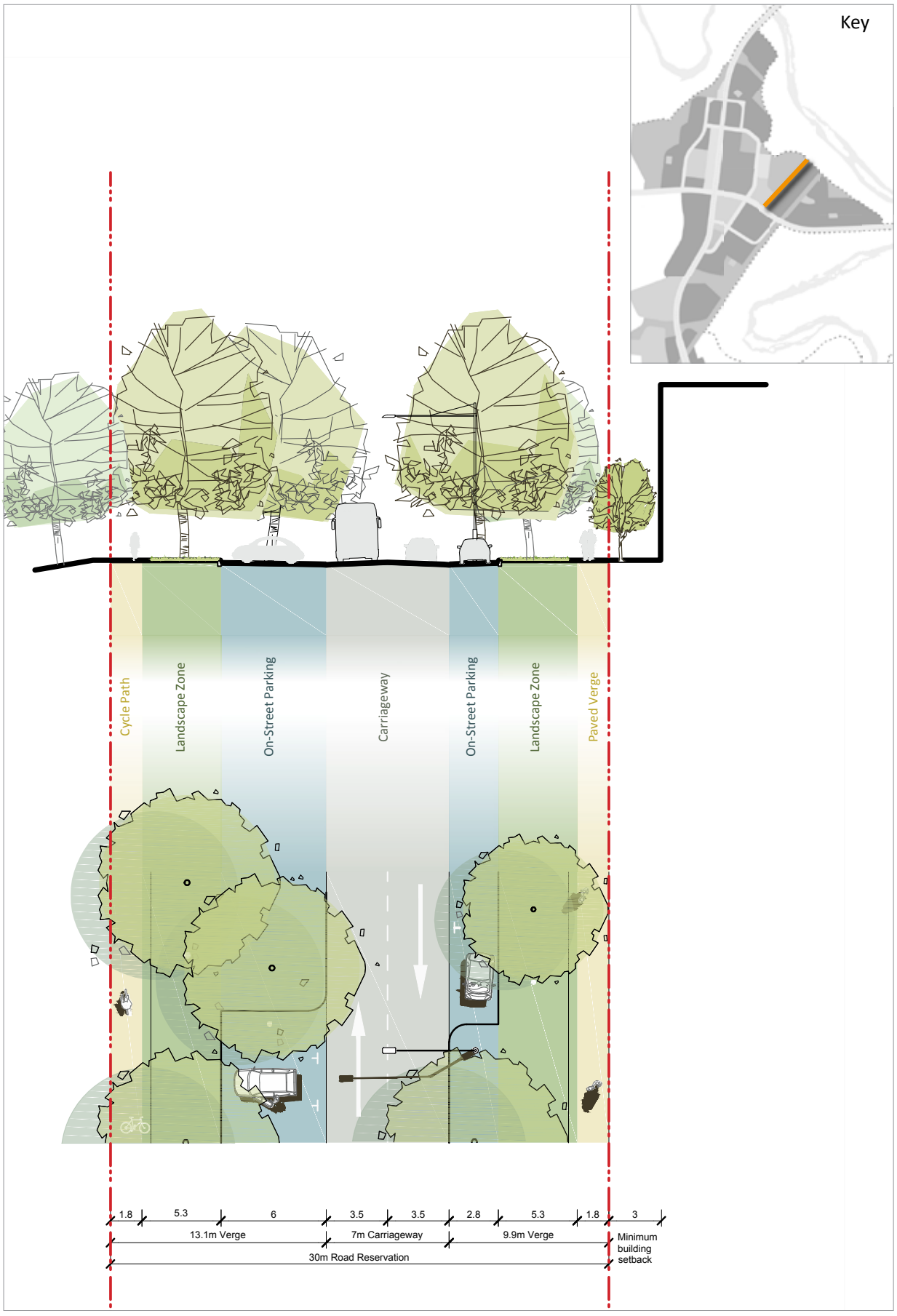


Artist impression illustrating the future desired character of the east terrace looking south

14.7 The college street

Design intent – street	
The college street is located on the eastern side of the town park and college precinct. The college street will play an important role in the allocation of shared and publicly accessible on-street car parking. This street also serves as a quiet residential street and streetscape interface between the town park and college precinct and medium density residential development (residential precinct D) to the east.	
Rules	**Criteria**
R60 The college street is classified as an Access Road A with the dimensions in Figure 43.	C60 The college street is generally consistent with the road reservation, carriageway and verge dimensions to achieve the desired character and principles in Figure 43.
There is no applicable rule.	C61 The college street is generally consistent with the principles in Figure 43 and achieves all of the following: a. perpendicular car parking bays in the western verge are integrated with large planting beds for large street trees, emphasising a predominantly landscape character at the interface of 'town and park' b. there is a generous pedestrian footpath/shared path in the western verge c. parallel car parking is integrated with large street trees in the eastern verge fronting residential development.

Figure 43: Typical street section – the college street

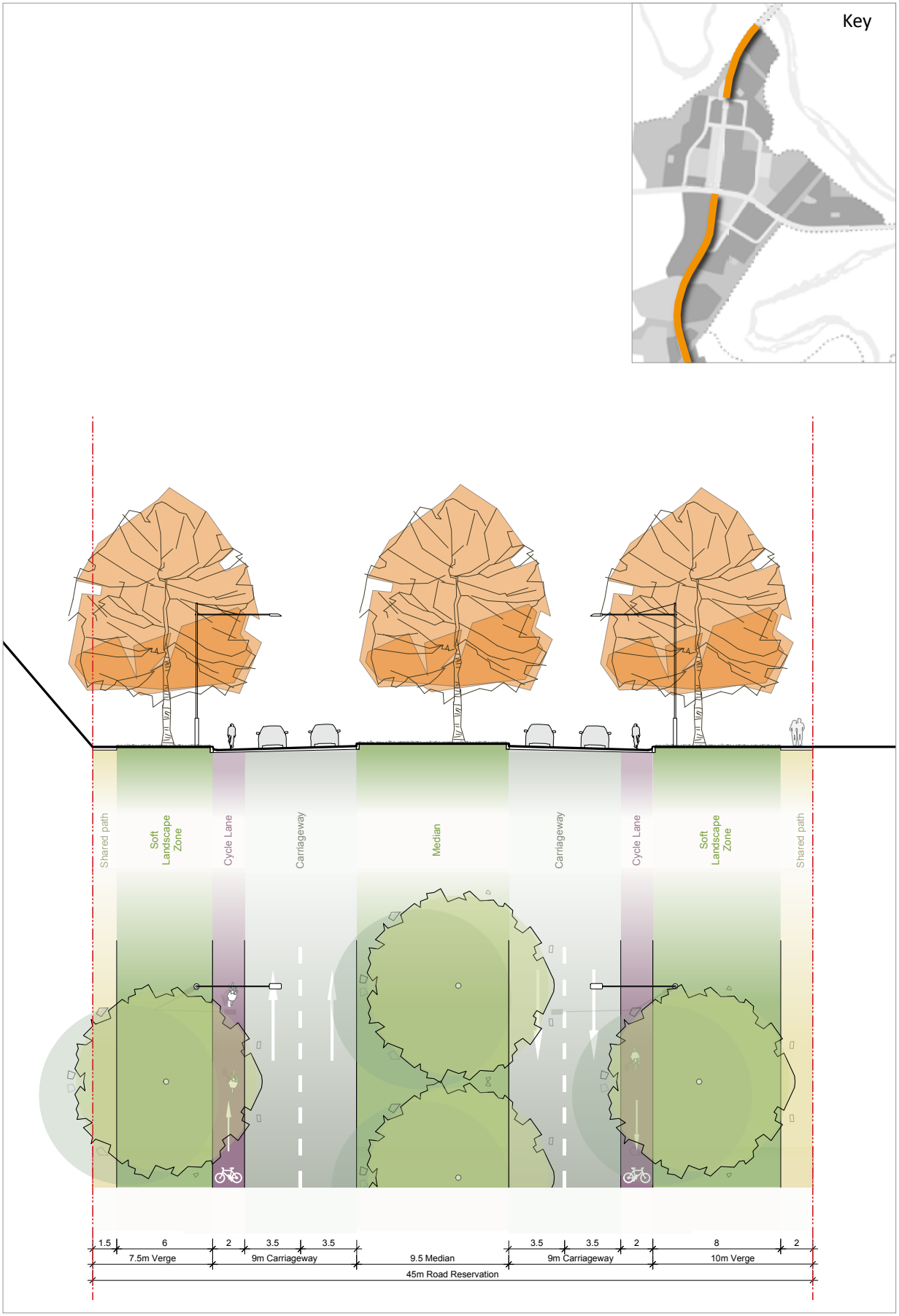


15 Approach streets

15.1 John Gorton Drive approaches to the commercial centre core

Design intent – street	
John Gorton Drive is the highest order street in the district of Molonglo, providing inter-town connections and trunk public transport access. John Gorton Drive changes to a more urban character as it passes through the commercial centre core to contribute to a sense of arrival at the centre.	
Rules	**Criteria**
R62 John Gorton Drive approaches to the commercial centre core are classified as Urban Arterials with the dimensions in Figure 44.	C62 John Gorton Drive approaches to the commercial centre core are generally consistent with the road reservation, carriageway, median and verge dimensions to achieve the desired character and principles in Figure 44.
There is no applicable rule.	C63 John Gorton Drive approaches to the commercial centre core are generally consistent with the principles in Figure 44 and achieve all of the following: a. there is a sense of arrival and contrast in street character upon entering and exiting the commercial centre core b. residential buildings are set back from the road reserve boundary to provide additional root zone (including root barriers) for large trees c. a boulevard character is provided, with continuous large street trees in the verges and median (with any driveway access to blocks, buildings and loading docks minimised) d. road reserve dimensions accommodate Frequent Rapid and local bus routes and a potential future light rail e. signalised intersections provide access into the commercial centre core and slow traffic to promote pedestrian amenity, to reduce the barrier effect of the large roadway, and correlate with the greater network of pedestrian and cycle paths and desire lines f. there is an on-road cycle lane and shared path in each direction g. a 70 km/hour speed limit applies.

Figure 44: Typical street section – John Gorton Drive approaches to the commercial centre core



15.2 The east-west arterial approaches to the commercial centre core

Design intent – street	
The east-west arterial plays an important role in providing a direct eastern connection from the suburbs of Molonglo and Denman Prospect, across Molonglo River to Tuggeranong Parkway, and to the city centre and central area. As the east-west arterial approaches the commercial centre core from the east and west, it changes to a more urban character and function. It provides efficient, unrestricted traffic flow and access to residential estates, with limited signalised intersections or roundabouts. In future, it will provide an important role in providing a direct eastern connection from Molonglo across Molonglo River to the city centre.	
Rules	**Criteria**
R64 The east-west approaches to the commercial centre core are classified as Urban Arterials with the dimensions in Figure 45 and 46.	C64 The east-west arterial approaches to the commercial centre core are generally consistent with the road reservation, carriageway, median and verge dimensions to achieve the desired character and principles in Figure 45 and 46.
There is no applicable rule.	C65 The east-west arterial approaches to the commercial centre core are generally consistent with the principles in Figure 45 and Figure 46 and achieve all of the following: a. there is a sense of arrival and contrast in street character when entering and exiting the commercial centre core b. landscape is enhanced with retaining walls and terracing to embankments, large trees and shared paths c. residential street address of a boulevard character with formal landscaping provides amenity to residential development, including continuous large street trees in the verges and median d. there is appropriate landscape treatment to environmentally sensitive ecosystems at the Molonglo River Park margins e. cuttings along the prominent eastern ridge line are minimised f. there is connectivity for cyclists, motorists and public transport, and crossing locations that correlate with the greater network of pedestrian and cycle paths and desire lines g. an on-road cycle lane and off-road pedestrian shared path is provided in each direction, with the Molonglo to city centre cycleway (‘cycle highway’) in the southern verge east of the commercial centre core h. road carriageways are bus capable, with a Frequent Rapid route and a potential future light rail corridor i. a 70 km/hour speed limit applies.

Figure 45: Typical street section – the east-west arterial eastern approach to the commercial centre core

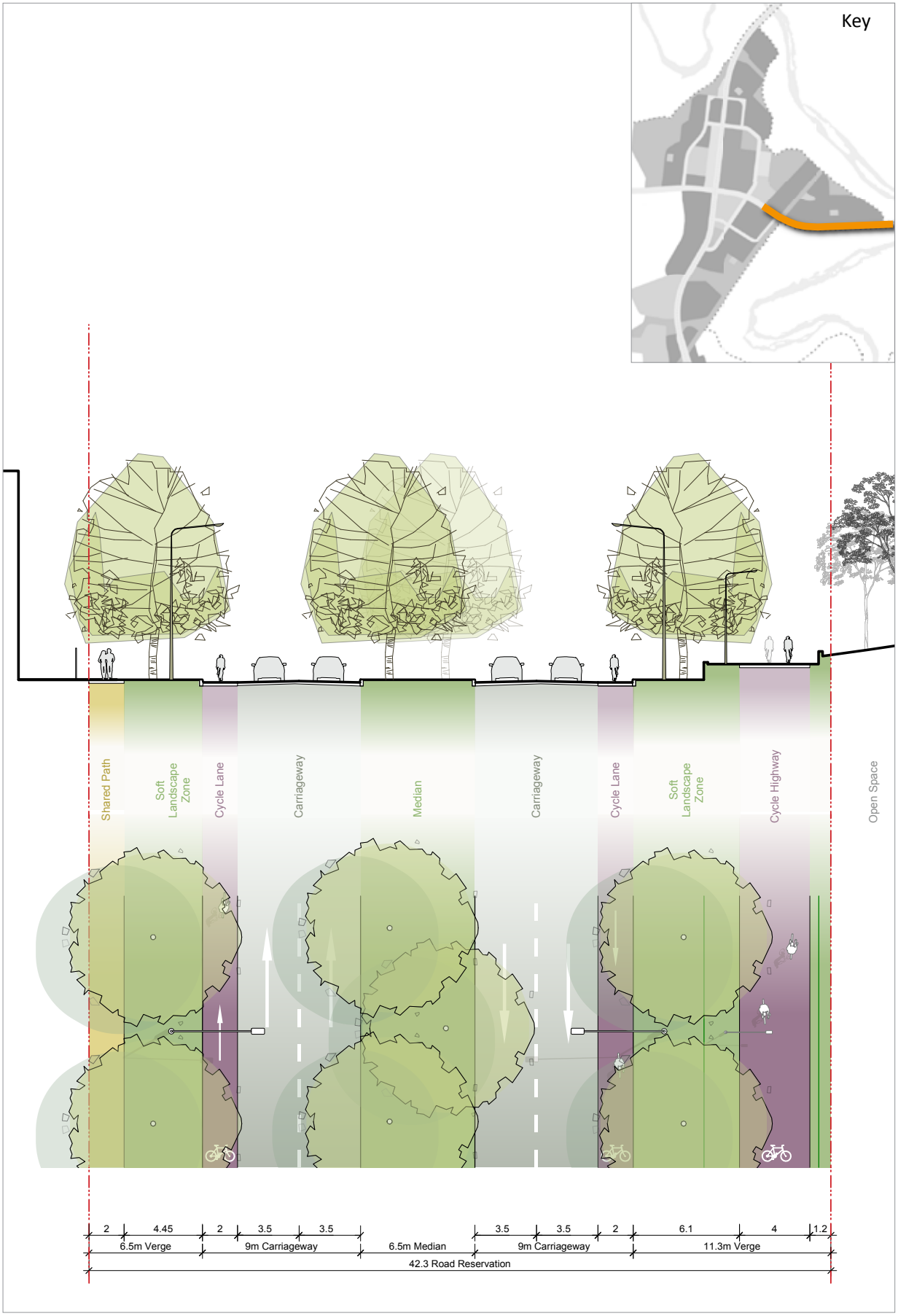
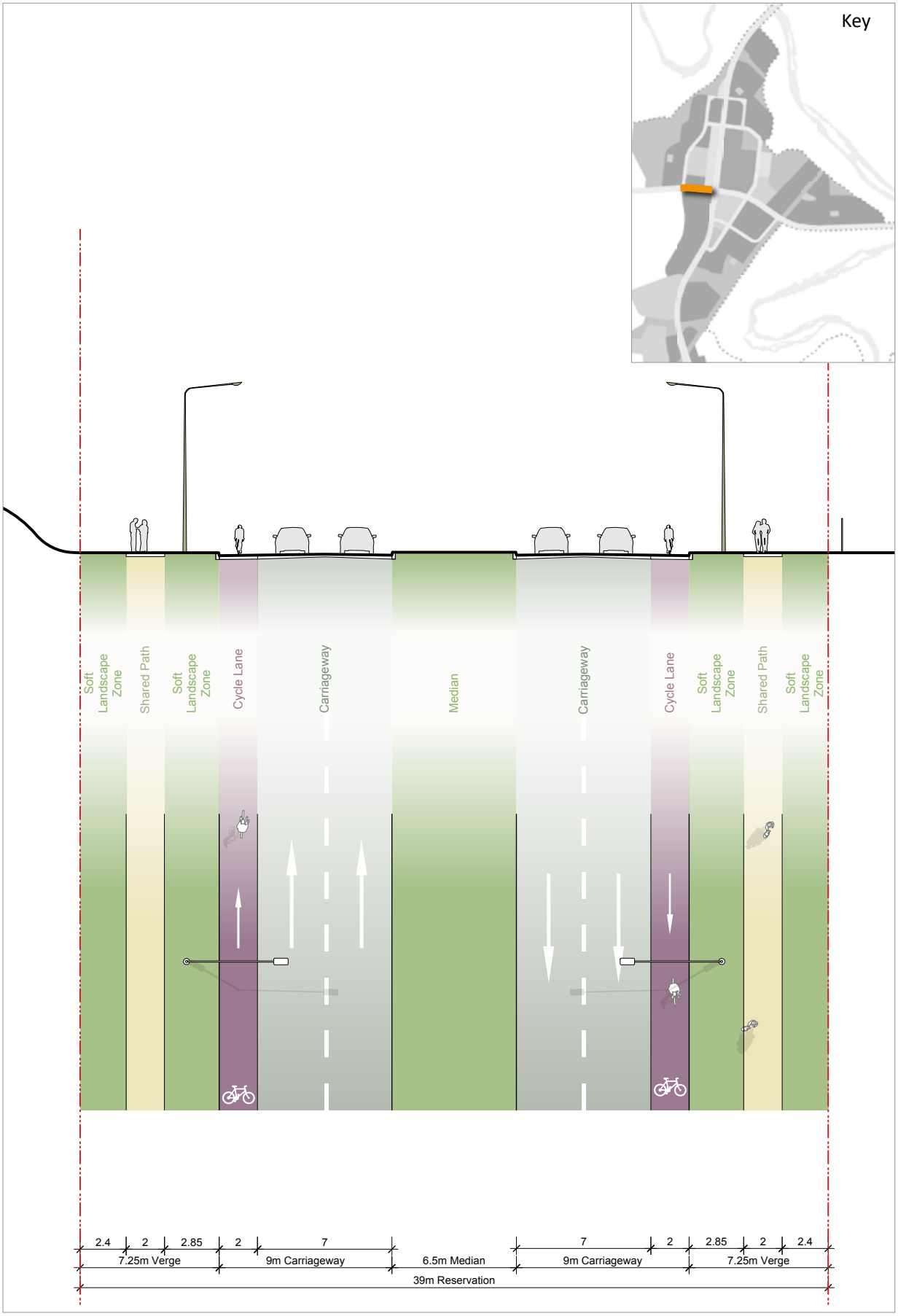
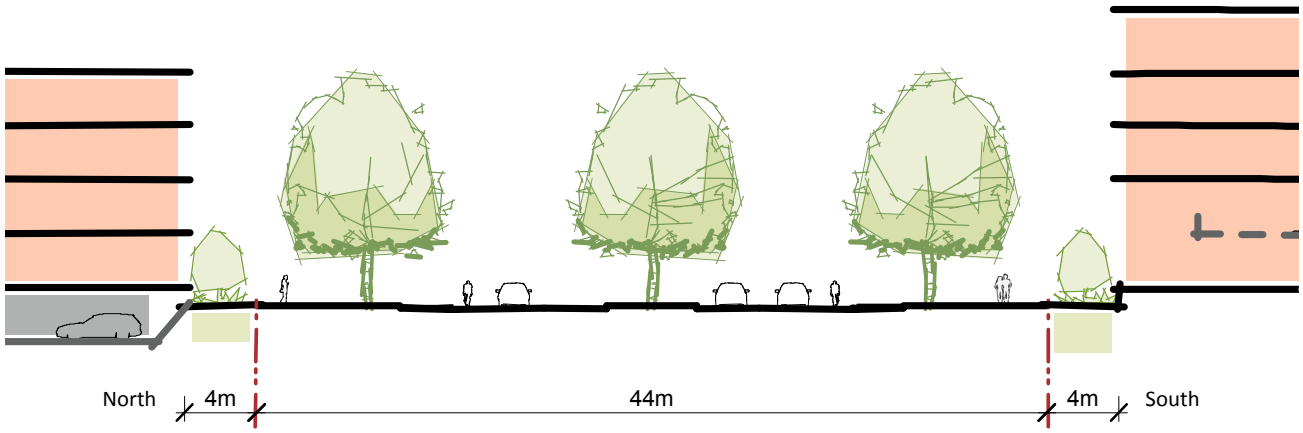


Figure 46: Typical street section – the east-west arterial western approach to the commercial centre core



Design intent – adjoining built form	
The east-west arterial has medium density development that increases as it approaches the commercial centre core. Safe and engaging public spaces are created along the street with active and diverse building frontages. Views and vistas over parkland and open spaces are maximised. Breaks in built form provide for shared paths for all local residential streets that connect through to surrounding parks, open space networks and community facilities. Buildings are designed to allow passive surveillance of the street below whilst preserving the privacy of residents. Gardens and green frontages are incorporated in residential development to enhance parkland address.	
Rules	**Criteria**
There is no applicable rule.	C66 The built form adjoining the east-west arterial approaches to the commercial centre core is generally consistent with the heights, land uses and public domain controls to achieve the desired character and principles in Figure 47.
There is no applicable rule.	C67 The built form adjoining the east-west arterial approach to the commercial centre core through residential development is generally consistent with the principles in Figure 47 and achieves all of the following: a. residential development with primary address, entrances and gardens (generally 3-4 m fronts the town park b. the balance between solar orientation, privacy and sunlight access to the streets and other external spaces is optimised c. there are opportunities for passive surveillance from residential units over adjoining public spaces d. buildings moderate and exploit the change in natural ground levels from parallel streets, while engaging with surrounding verge levels at grade, with minimal abrupt changes of level.

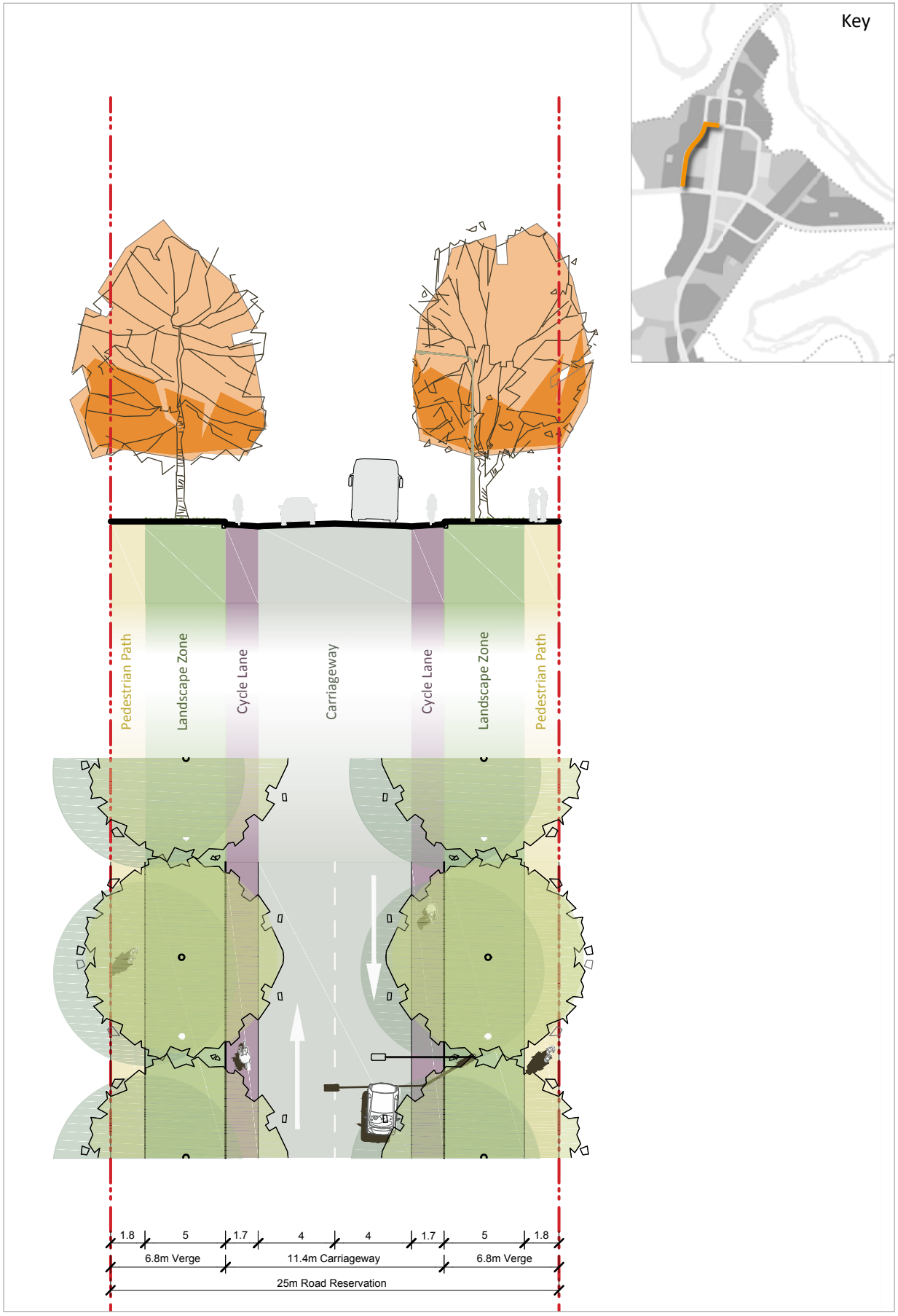
Figure 47: Building envelope control section 12 – the east-west arterial approach at residential development



5.3 The western collector

Design intent – street	
The western collector provides an efficient Major Collector transport connection for north and south bound traffic bypassing the commercial centre core from Denman Prospect. The western collector forms part of the Frequent Local public transport bus network and services a non-government school site.	
Rules	**Criteria**
R68 The western collector is classified as a Major Collector with the dimensions in Figure 48.	C68 The western collector is generally consistent with the road reservation, carriageway and verge dimensions to achieve the desired character and principles in Figure 48.
There is no applicable rule.	C69 The western collector is generally consistent with the principles in Figure 48 and achieves all of the following: a. continuous large street trees in the verges provide a 'leafy' avenue character that distinguishes the street as a higher order route in the local network b. there are pedestrian and/or shared paths and designated safe pedestrian crossing points c. an on-road bi-directional cycle lane is provided d. a non-continuous refuge/median provides a safe crossing point for school children and other pedestrians e. school pick-up and set-down areas are not located on the western collector, but on nearby local streets or within the non-government school site f. road carriageways are bus capable, with local bus routes and associated bus stops servicing the non-government school g. gradients are generally less than 5% to facilitate optimum access for cyclists and buses h. there are two general traffic lanes (one lane in each direction).

Figure 48: Typical street section – the western collector



16 Residential streets

16.1 Address streets in high and medium density residential areas

Design intent – street	
Address streets provide access to higher density residential neighbourhoods and medium density residential neighbourhoods. The quality and character of these streets will be enhanced through median planting and swales where possible.	
Rules	**Criteria**
R70 Address streets in high density residential areas have the dimensions in Figure 49 and 50.	C70 Address streets in high density residential areas are generally consistent with the road reservation, carriageway and verge dimensions to achieve the desired character and principles in Figure 49 and 50.
R71 Address streets in medium density residential areas have the dimensions in Figure 49 and 50.	C71 Address streets in medium density residential areas are generally consistent with the road reservation, carriageway and verge dimensions to achieve the desired character and principles in Figure 49 and 50.
There is no applicable rule.	C72 Address streets in high and medium density residential areas are generally consistent with the principles in Figure 49 and Figure 50 respectively, and achieve all of the following: a. landscape corridors connect residences to local neighbourhood parks and wider open space networks b. continuous large street trees in the verges are provided, where possible (allowing access to blocks, buildings and loading docks), to provide amenity for pedestrians and residents c. continuous shared paths are uninterrupted by driveway crossings d. there is a generous pedestrian footpath/shared path in the western verge e. on-street parallel car parking is provided f. driveway crossings are minimised and paired where possible.

Figure 49: Typical street section – address streets in high density residential areas

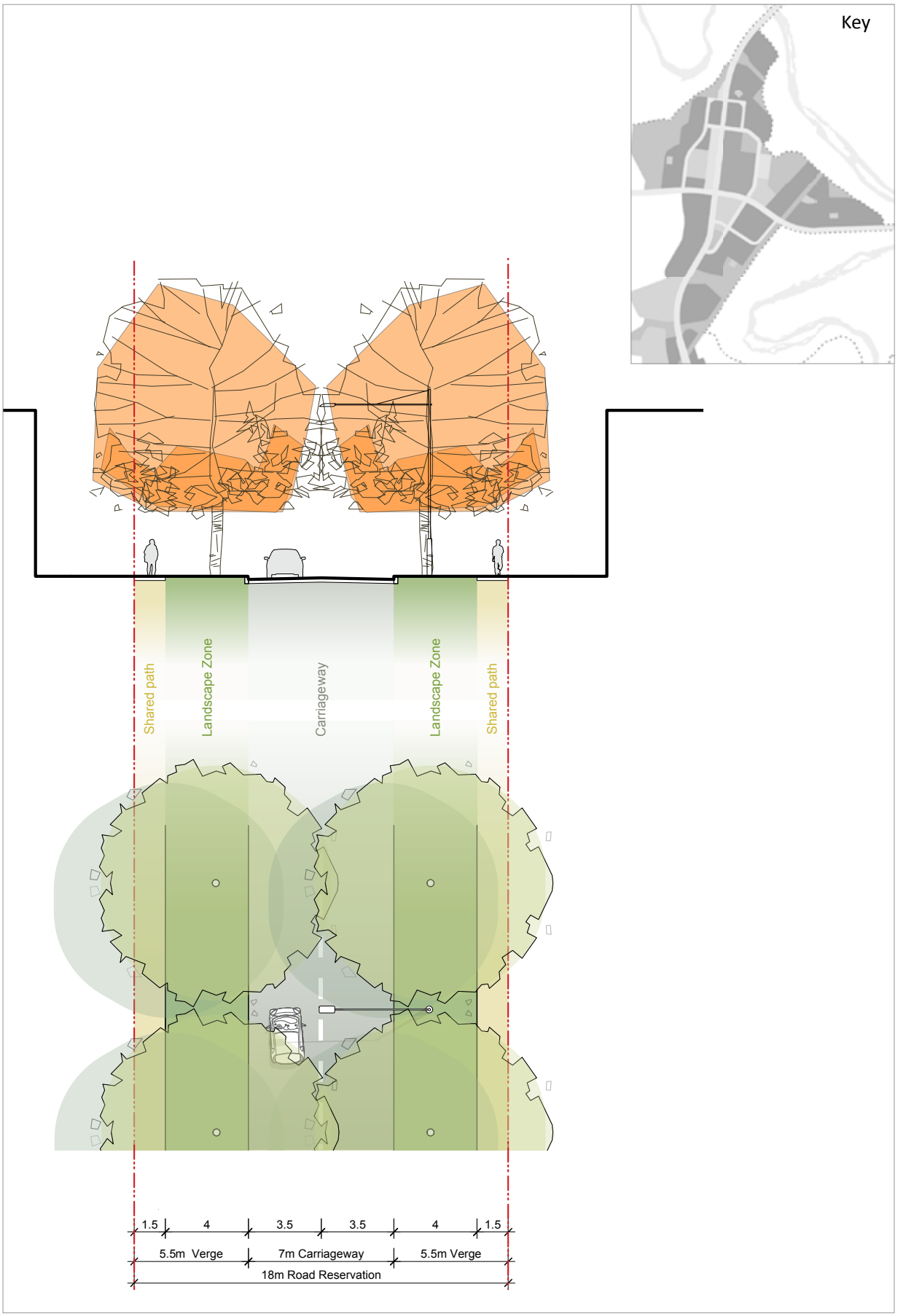
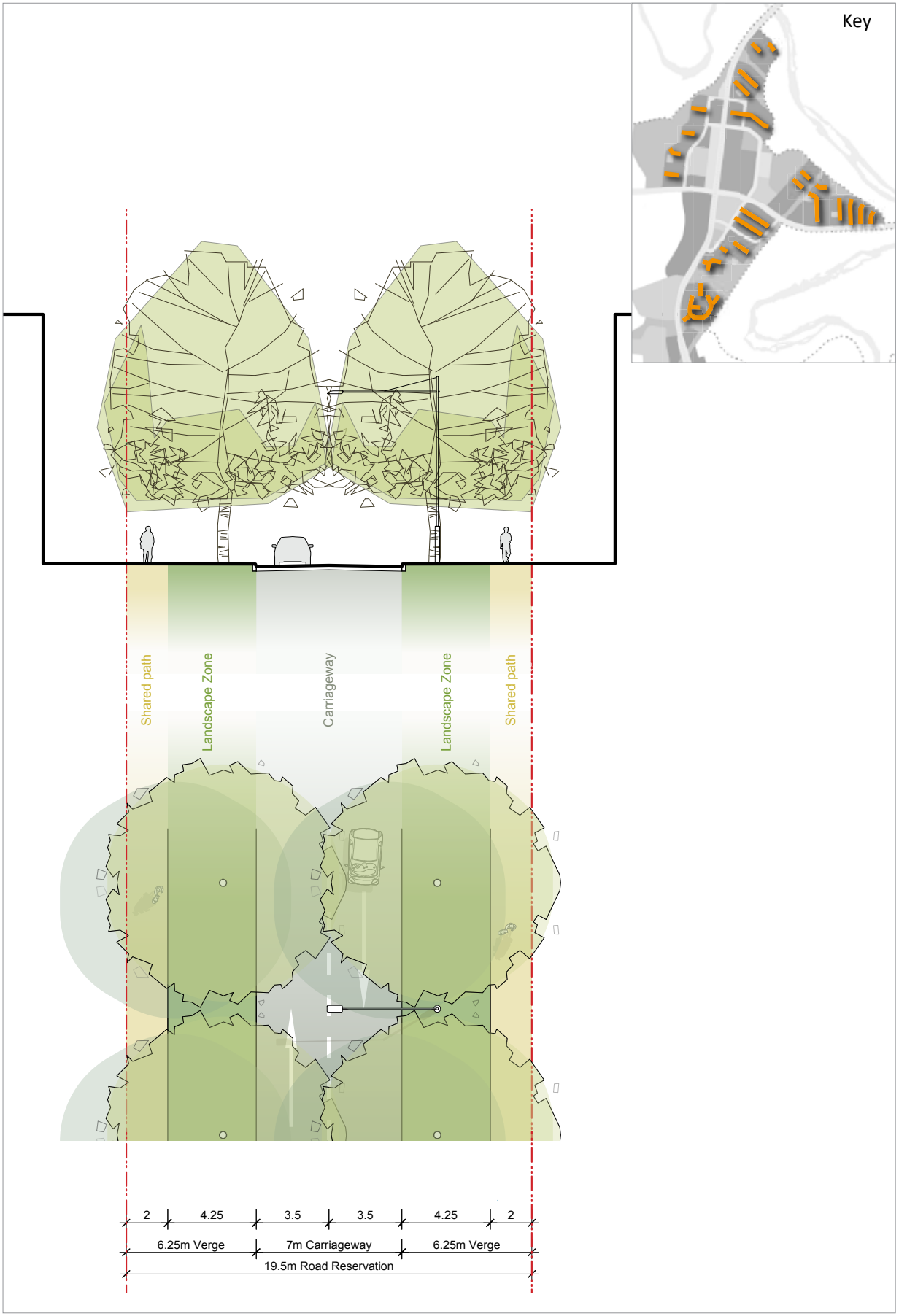


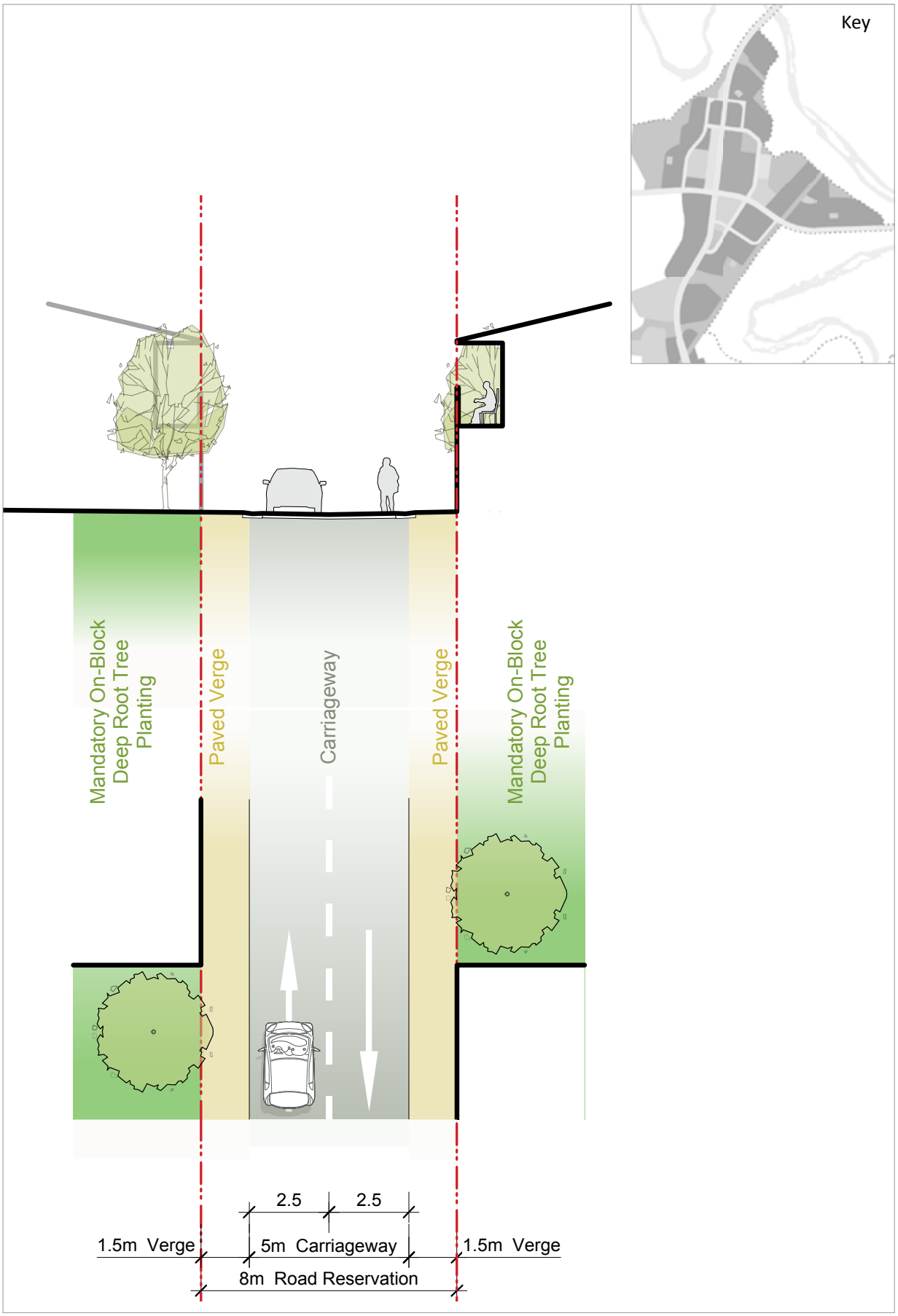
Figure 50: Typical street section – address streets in medium density residential areas



16.2 Rear lanes

Design intent – street	
Rear lanes provide rear car parking access to denser residential developments, enabling address streets to achieve high quality streetscapes and pedestrian amenity with footpaths and street trees being uninterrupted by drive crossings, and habitable frontages and entrances predominating in the absence of garages. Rear lanes have a quiet, landscaped character with low traffic speed and tree planting to soften the hard edges of the built form and provide shade and pedestrian amenity.	
Rules	**Criteria**
R73 Rear lanes are in accordance with the dimensions in Figure 51.	C73 Rear lanes are generally consistent with the road reservation, carriageway and verge dimensions to achieve the desired character and principles in Figure 51.
There is no applicable rule.	C74 Rear lanes are generally consistent with the principles in Figure 51 and achieve all of the following: a. a finer scale streetscape is provided b. there is connectivity and diversity of experience within the urban fabric c. housing types are provided that aid affordability and diversity, such as row housing and flats sited above garages d. there are opportunities for surveillance from flats above garages e. a walkable, pedestrian friendly environment is encouraged with lower vehicle speeds f. outlook from surrounding residences is enhanced with deep root planting zones on-block to soften the built form and zero building setbacks g. there is solar access and surveillance to dwellings h. garaging and service functions are accessed off the lane, with housing addressing the primary street frontage to reduce dominance of garaging, create high quality streetscapes and improve public safety and amenity, and provide uninterrupted pedestrian paths.

Figure 51: Typical street section – rear lanes



16.3 Edge roads

Design intent – street and built form	
Edge roads provide an appropriate interface between residential areas and open space, characterised by slower moving vehicles and high pedestrian amenity, allowing safe interaction and quiet enjoyment without the barrier of major traffic routes. These streets discourage 'rat running' to optimise residential amenity. These streets directly interface with Molonglo River Park and nature reserve, and play important roles for stormwater and bushfire management, and controlling access to sensitive ecological areas.	
Rules	**Criteria**
R75 Edge roads are classified as Access Road B with the dimensions in Figure 53.	C75 Edge roads are generally consistent with the road reservation, carriageway and verge dimensions to achieve the desired character and principles in Figure 53.
There is no applicable rule.	C76 Edge roads are generally consistent with the principles in Figure 53 and achieve all of the following: a. views are maximised to the spectacular local landscape setting from both the public realm and private development b. there is a clear boundary for containment of domestic weeds and other contaminants from entering Molonglo River Park c. the edge street reserve, including verges and cycle paths, form part of Inner Asset Protection Zones (IAPZ), contributing to protecting life and property in bushfire management d. there are stormwater cut-off and drains to treatment ponds e. embankments, retaining walls and fences are strategically utilised to delineate the boundary between urban and Molonglo River Park management zones, and to assist control of unregulated access (i.e. pedestrian, cycle and vehicle) into sensitive ecological areas f. edge treatments such as retaining walls are utilised to manage bushfire, including control burns, as well as providing a distinctive and aesthetically sympathetic urban edge to Molonglo River Park g. there is access to bushfire protection zones, and support for emergency vehicle access and egress h. entry points to Molonglo River Park enhance connectivity to recreational areas, while managing their protection i. on-street parallel car parking is provided j. large street tree planting is provided at spacing specified in the Molonglo River Park Concept Plan and the Plan of Management for Molonglo River Reserve k. a verge on the Molonglo River Park side accommodates: i. a minimum 3 m wide trunk cycle path and associated lighting ii. landscaped area with maximum 1:4 gradient iii. underground infrastructure iv. a sealed pedestrian footpath

Rules	Criteria
	l. associated road works and Inner Asset Protection Zones do not encroach into Molonglo River Park, or impact on the Pink-Tailed Worm Lizard habitat or the 20 m buffers.
There is no applicable rule.	C77 The built form adjoining edge roads is generally consistent with the heights, land uses and public domain controls to achieve the desired character and principles in Figure 52.

Figure 52: Building envelope control section 13 – edge roads

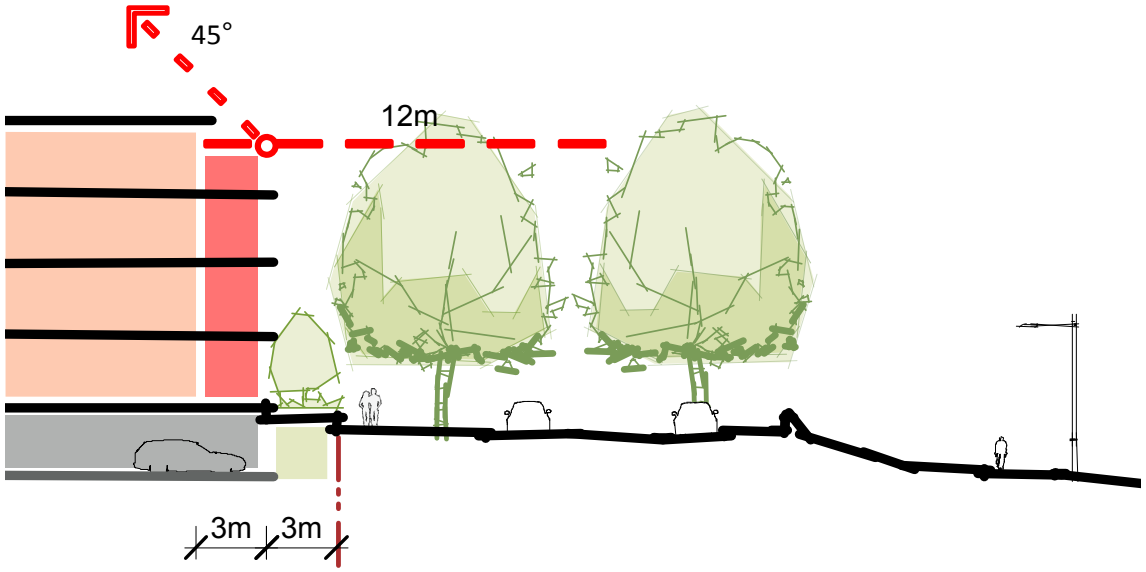
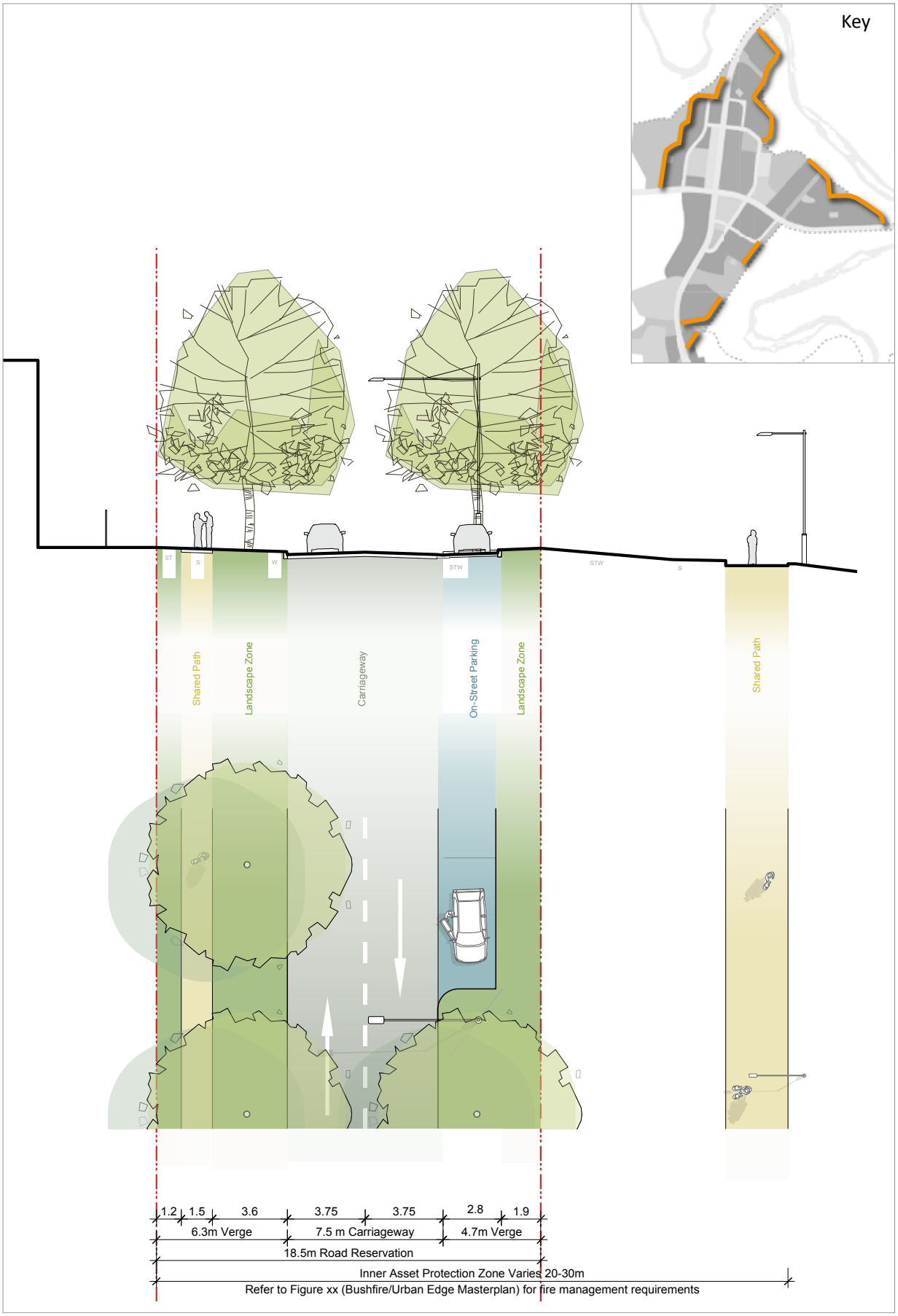


Figure 53: Typical street section – edge roads



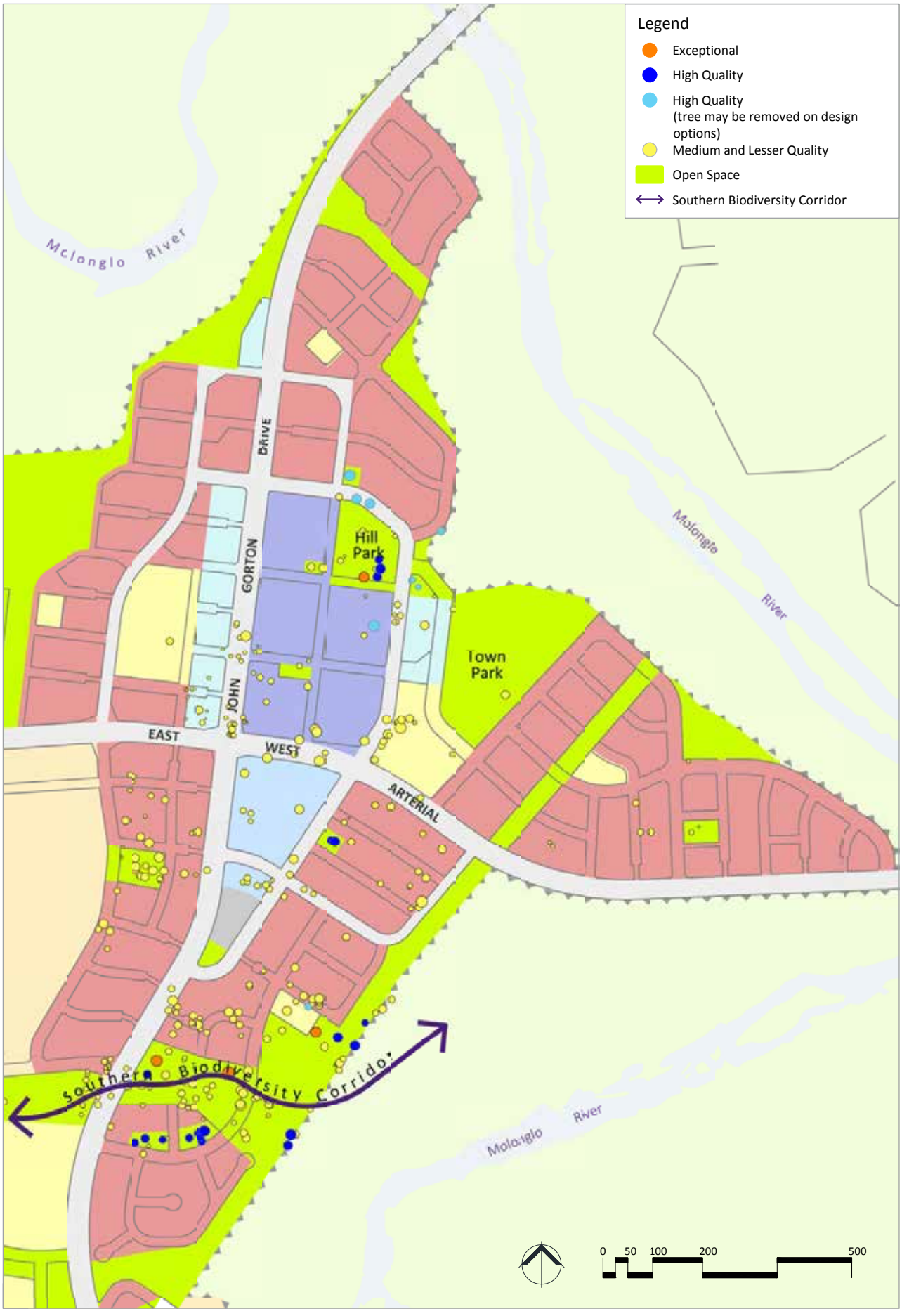
Artist impression illustrating the future desired character of the urban edge looking north-east towards the link bridge

Element E – Environmental protection

17 Tree retention and protection

Objective	
To retain and protect high and exceptional quality existing native trees where practicable.	
Rules	**Criteria**
R78 Retain and protect all exceptional quality trees in Figure 54.	C78 Requests for removal of exceptional quality trees in Figure 54 are to be undertaken in consultation with the planning and land authority.
There is no applicable rule.	C79 The planning and land authority acknowledges the hill park in Figure 54 as a valuable open space providing amenity and passive recreation opportunities. Due consideration is to be given to tree retention and protection in the hill park where practicable. Requests for removal of trees from the hill park on Figure 54 are to be undertaken in consultation with the planning and land authority.
There is no applicable rule.	C80 The planning and land authority acknowledges the southern biodiversity corridor in Figure 54 as providing an important biodiversity connection between the urban area and high quality Box Gum Woodland in Molonglo River Park. Requests for removal of trees in the southern biodiversity corridor on Figure 54 are to be undertaken in consultation with the planning and land authority.
There is no applicable rule.	C81 Requests for removal of trees in the commercial centre core in Figure 54 are to be undertaken in consultation with the planning and land authority.
There is no applicable rule.	C82 Requests for removal of trees outside the hill park, southern biodiversity corridor and the commercial centre core in Figure 54 are to be undertaken in consultation with the planning and land authority.

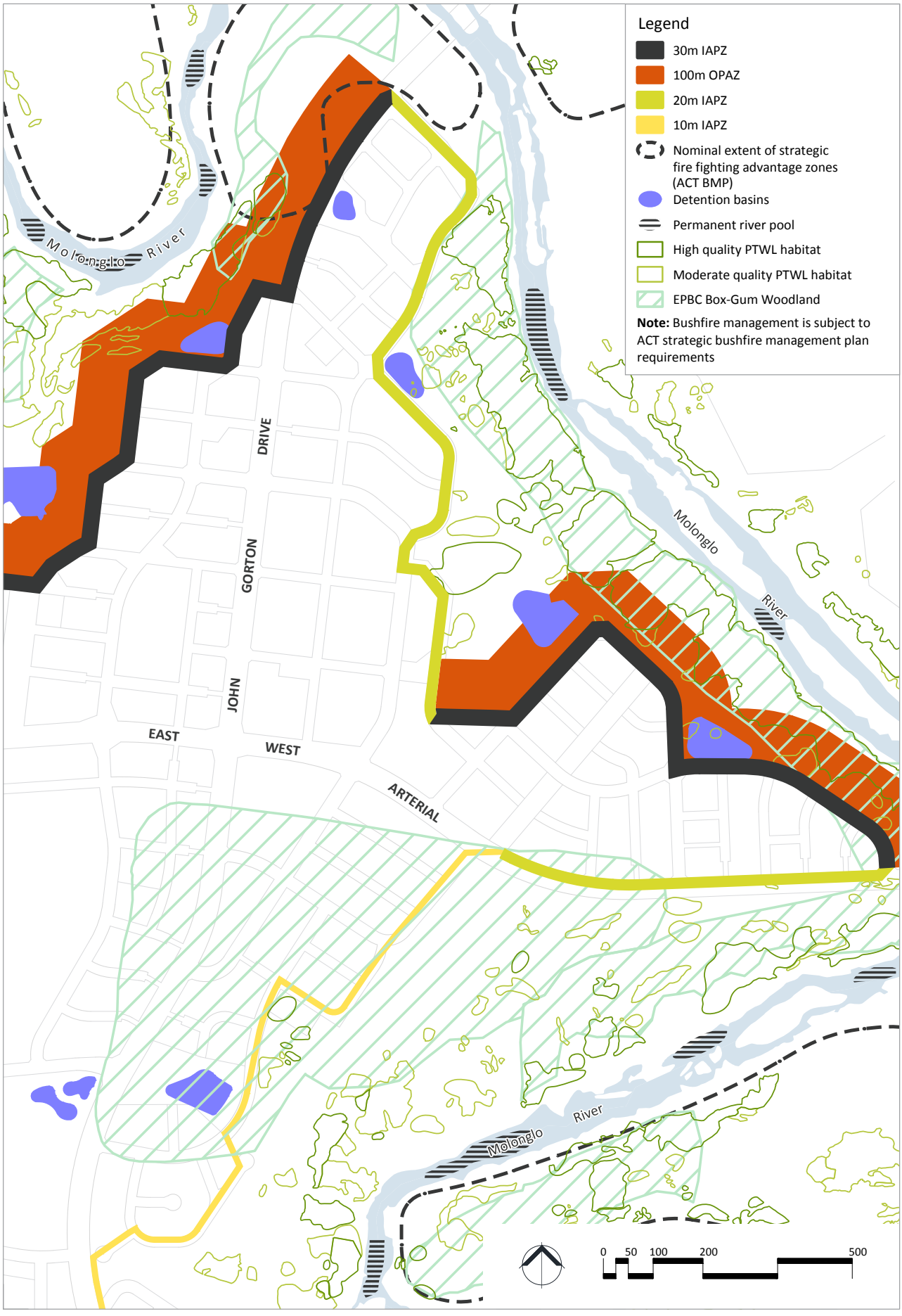
Figure 54: Tree retention and protection



18 Bushfire management

Objective	
To minimise risk of bushfire threat to the Molonglo Valley population.	
Rules	**Criteria**
R83 Bushfire management is in accordance with Figure 55. Prior to the endorsement of any EDP, the applicant is to prepare a Bushfire Risk Assessment and Management Plan to the satisfaction of the planning and land authority considering: a. Planning for Bushfire Risk Mitigation General Code b. Strategic Bushfire Management Plan for the ACT c. Risk Management – Principles and Guidelines AS/NZS ISO 31000:2009 d. Molonglo River Park Concept Plan (particularly Figure 17 from the report) e. Plan of Management for Molonglo River Reserve f. Molonglo Valley NES Plan g. Inner Asset Protection Zones (IAPZ) are wholly located within the development area, and do not impact on Pink-Tailed Worm Lizard habitat or the 20 m buffers.	This is a mandatory requirement. There is no applicable criterion.

Figure 55: Bushfire management



19 Stormwater management

Objective	
To ensure stormwater quality improvement and protection of water quality in Molonglo River and Murrumbidgee River downstream.	
Rules	**Criteria**
There is no applicable rule.	C84 Stormwater management is not inconsistent with the principles in Figure 56 and achieves all of the following: a. opportunities for natural infiltration in the urban area prior to collection in major stormwater detention ponds are maximised b. topography is responded to and complemented c. high quality urban parks and path networks are incorporated d. stormwater runoff is directed to designated detention ponds e. impacts on Pink-Tailed Worm Lizard habitat and other environmentally sensitive habitats, areas and species are minimised f. natural drainage lines are utilised for outflow from ponds without causing erosion and while ensuring public safety during and after heavy rainfall events; and for an aesthetically and functionally sensitive landscape treatment to flow paths in Molonglo River Park g. treated surface water is re-used for non-potable purposes h. urban stormwater flow paths, cut off drains, sediments ponds and related stormwater treatment infrastructure in the urban area is contained and integrated with the landscape design of edge streets and public open space networks i. bio-retention technologies are integrated as a key measure, due to steep terrain and greater hydraulic loading capacity (combined with ponds) j. stormwater harvesting and recycling of non-potable water is encouraged k. there is connectivity along Molonglo River Park.

Figure 56: Stormwater management

Element F – Staging

20 Indicative early release

Objective	
To guide staging and implementation of the centre so it contributes to the achievement of the vision, recognising that it will develop and redevelop over time.	
Rules	**Criteria**
There is no applicable rule.	C85 Implementation and staging sequence is not inconsistent with the principles outlined in Figure 57 and achieves all of the following: a. there is capacity to support an ultimate development scenario b. infrastructure services are integrated c. the scale, nature and timing of infrastructure delivery is coordinated with demand for appropriately serviced urban land d. implementation and appropriate consultation between lead directorates/agencies and other directorates/agencies is coordinated to ensure optimal planning outcomes and efficient government spending e. temporary surface car parking is permitted during earlier phases of development, and replaced as demand increases for sites for new buildings and car parking structures f. early mixed-use development in the commercial centre core is delivered in a consolidated form to provide a critical mass of activation in the centre and to support the local population, including the following sites located: i. south of the east-west arterial – the corso, and to the east of John Gorton Drive, for a homemakers/hardware area with uses such as hardware and service stations ii. in the commercial centre core facing onto the east-west arterial – the corso, for mixed-use development iii. immediately to the west of John Gorton Drive, for mixed-use development iv. in residential precinct C, for residential development g. early construction of the public domain in the commercial centre core is encouraged, including the hill park, tree planting, shared zone pavement and pedestrian crossings.

Figure 57: Indicative early release in commercial centre core

Endnotes

1. The Molonglo River Park/urban development boundary shown is agreed at this point in time, and may change subject to future detailed estate development planning and infrastructure design, and the conservation Plan of Management for Molonglo River Reserve.
2. In this plan, the commercial centre is also referred to as 'the centre'.
3. The commercial centre core and residential precincts referred to in this plan are shown in Figure 9.
4. Streets referred to in this plan are shown in Figure 8.
5. The Frequent Network is the network of rapid public transport corridors where transit service (bus rapid transit or light rail) runs at least every 15 minutes in both directions throughout the day and into the evening, every day of the week. These include Frequent Rapid routes (potential future light rail corridors) between town centres and Frequent Local routes.
6. Refer also to Figure 18 for special building heights that apply to the commercial centre core.
7. An urban heat island is a metropolitan area that is warmer than surrounding non-urban areas due to its capacity to absorb a greater amount of heat from development and human activity. The heat island effect in urban areas can be mitigated by measures such as the use of rooftop gardens and other landscaping.
8. In this plan, a Community Needs Assessment is prepared by an independent organisation in consultation with the planning and land authority to ensure the size, range and distribution of community facilities will meet the needs of the community. A Community Needs Assessment is a mandatory requirement for any estate development plan (EDP) submission and will be subject to review by the authority prior to any form of development consent.
9. The scale, range and distribution of community facilities in Figure 11 is not inconsistent with the latest community facility needs identified at the time of publication and will be given due consideration in future community facility planning by the planning and land authority. However, Figure 11 is indicative only and is not a rule. Future Community Needs Assessments will be required to refine the size, range and distribution of community facilities to the satisfaction of the authority.
10. Minimum gross floor area (GFA) and site area in Figure 11 are indicative only.
11. A ground floor presence does not necessarily comprise leasable community facility floor space. It could simply be a clearly marked street level entry, including a common ground floor foyer, with access for people of all abilities to an upper floor community facility.
12. Transit-oriented development (TOD) is high density, mixed-use development in close proximity to public transport hubs with excellent pedestrian and cycle connections to these hubs. The objective of TOD is to encourage higher patronage of public and active transport use, and thus reduce the dependence on private vehicles.
13. The ACT Place Names Committee has not yet named the streets and key places of the Molonglo commercial centre and environs (apart from John Gorton Drive). The street and key places names used in this concept plan are therefore temporary until they are formally named.
14. Big box retail is a large retail establishment such as a department store or supermarket.
15. The interim scenario is prior to construction of the bridge connection over Molonglo River to Tuggeranong Parkway, and the ultimate scenario is after the construction of the bridge connection.