



Shell Cove Boat Harbour Precinct

Concept Plan Application and Environmental Assessment Appendix O - Street Guidelines

prepared by

LFA (Pacific) Pty Ltd

date

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Shell Cove Boat Harbour Precinct

Draft Conceptual Street Guidelines





These draft guidelines outline the conceptual vision of the Boat Harbour Precinct. They provide notional cross sections and indicative illustrations. All details are subject to change in conjunction with further design development of subsequent Project Applications.

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This document has been prepared by LFA (Pacific) Pty Ltd for Australand Corporation (NSW) Pty Ltd and Shellharbour City Council to provide design guidance for the following streets:

- Avenue 1A, 1B and 1C
- Visual Corridor 2A, 2B, 2C and 2D
- Connecting Street 3A, 3A1, 3B, 3C
- Minor Streets 4A and 4B
- Main Street 5A
- Entry 5B



Fig. 01 - Road Network/Types

Type		Width (m)	Description	Name/Number	Tree Form & Character Number*	Paved Width (m)
1. Avenue						
1A		30	Median Separated	Cove Boulevard; Harbour Boulevard	2, 7	
1B		30	Separated		2	
1C		25	Non-separated		2	10.6
2. Visual Corridor						
2A		30	Median Separated		4	
2B		26	Non-separated		2, 4	10.6
2C		20	Non-separated		4	
2D		15	Non-separated		4	
3. Connecting Street						
3A		20	Major		2, 4, 5	9
3A1		20	Major with Parking Bays		2, 4	
3B		15	Secondary		5	8
3C		12	Minor		5	6
4. Minor Street						
4A			Street		5	6
4B			Lane		5, 6	4.5
5. Specials						
Entry		26			2, 7	
Main Street		Varied			2, 7, 8	

* Refer Tree Form and Character



Callistemon salignus (Pink tips)



Cupaniopsis anacardioides (Tuckeroo)



Eucalyptus amplifolia (Cabbage gum)

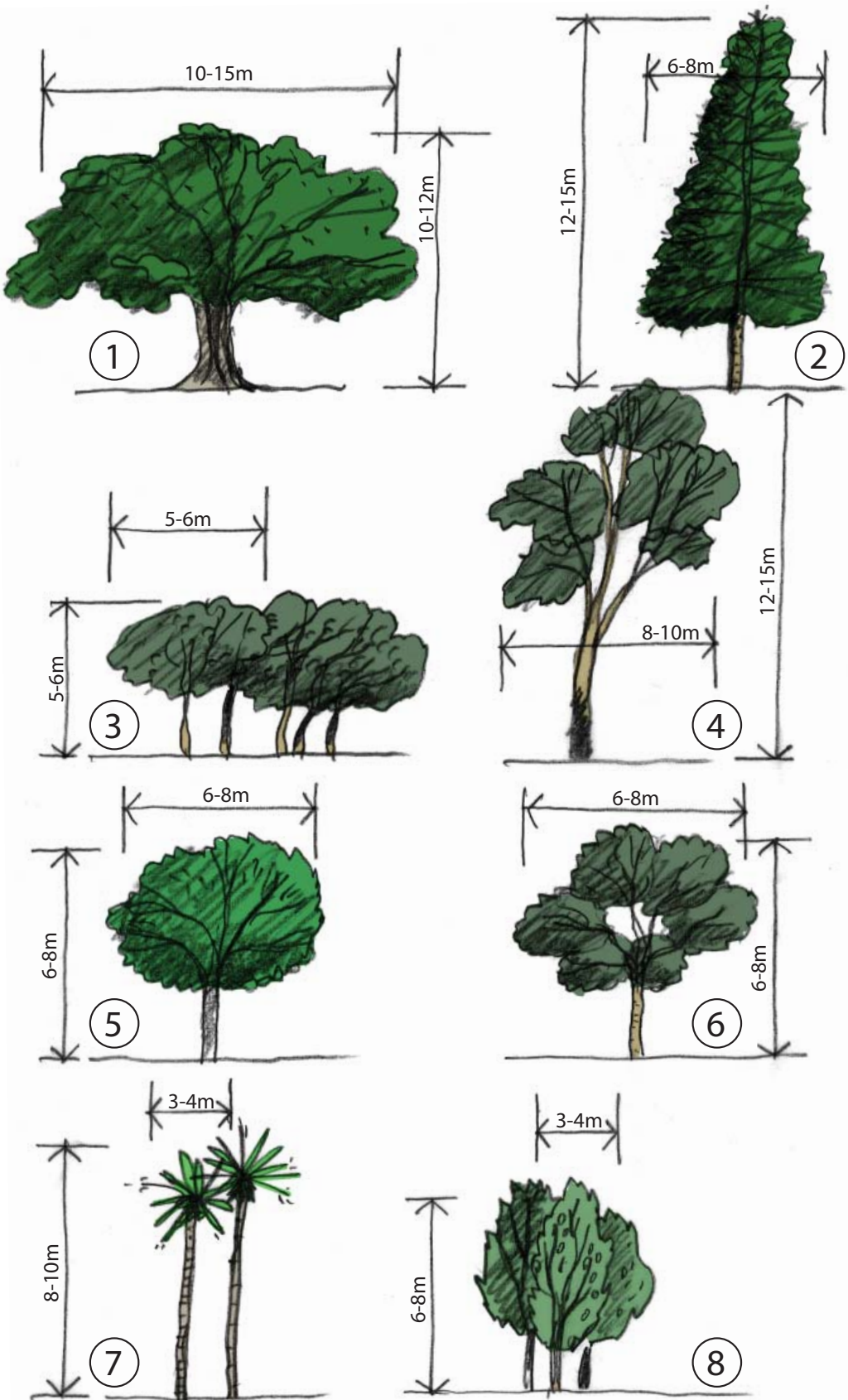


Fig. 02 - Tree Types

Tree Form and Character

1.	a.	<i>Ficus macrophylla</i> (Morton Bay Fig)
	b.	<i>Ficus rubiginosa</i> (Port Jackson Fig)
2.	a.	<i>Araucaria heterophylla</i> (Norfolk Island pine)
3.	a.	<i>Banksia integrifolia</i> (Coastal banksia)
	b.	<i>Callistemon salignus</i> (Pink tips)
	c.	<i>Melaleuca styphellioides</i> (Prickly paperbark)
4.	a.	<i>Alphitonia excelsa</i> (Red ash)
	b.	<i>Eucalyptus amplifolia</i> (Cabbage gum)
	c.	<i>Eucalyptus tereticornis</i> (Forest redgum)
5.	a.	<i>Glochidion ferdinandi</i> (Cheese tree)
	b.	<i>Podocarpus elatus</i> (Plum pine)
	c.	<i>Syzigium australe</i> (Brush cherry)
6.	a.	<i>Cupaniopsis anacardioides</i> (Tuckeroo)
7.	a.	<i>Livistona australis</i> (Cabbage tree palm)
8.	a.	<i>Melaleuca decora</i>

Note:
Indicative tree species subject to further investigation.



Banksia integrifolia (Coastal banksia)



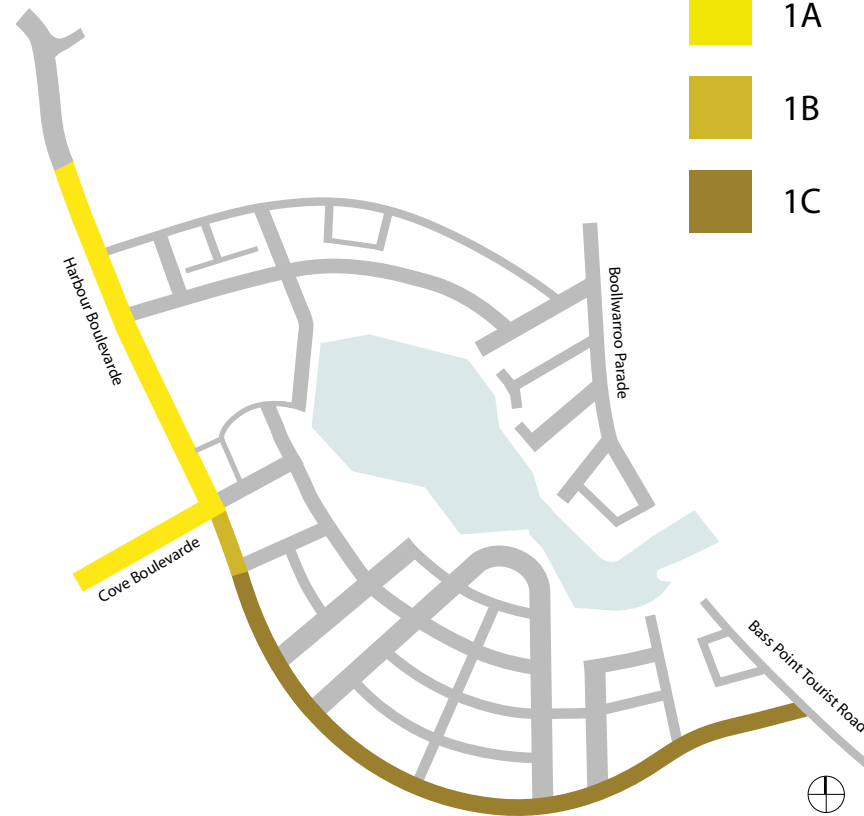
Araucaria heterophylla
(Norfolk Island pine)

Street Network

Avenue 1A

LEGEND

- 1A
- 1B
- 1C



- Main entry route and primary structural definition of harbour zone.
- Generally two transit lanes in each direction with additional deceleration and acceleration lanes (as required) at intersections.
- No access to adjacent lots.
- No parking lanes.
- Planted median separation containing vertical accent trees (eg. cabbage palms), groundcover and formal avenue planting within grassed verges on either side.
- Sections of this road may have a requirement for acoustic devices in the form of continuous walling which will include a planted border.
- Roundabouts containing trees and groundcover.
- Pedestrian footpath on the eastern side. and
- Separate, combined pedestrian and main cycle path on the western side.
- Street light poles at street edge.
- Standard vertical kerb and gutter with bituminous concrete pavement.

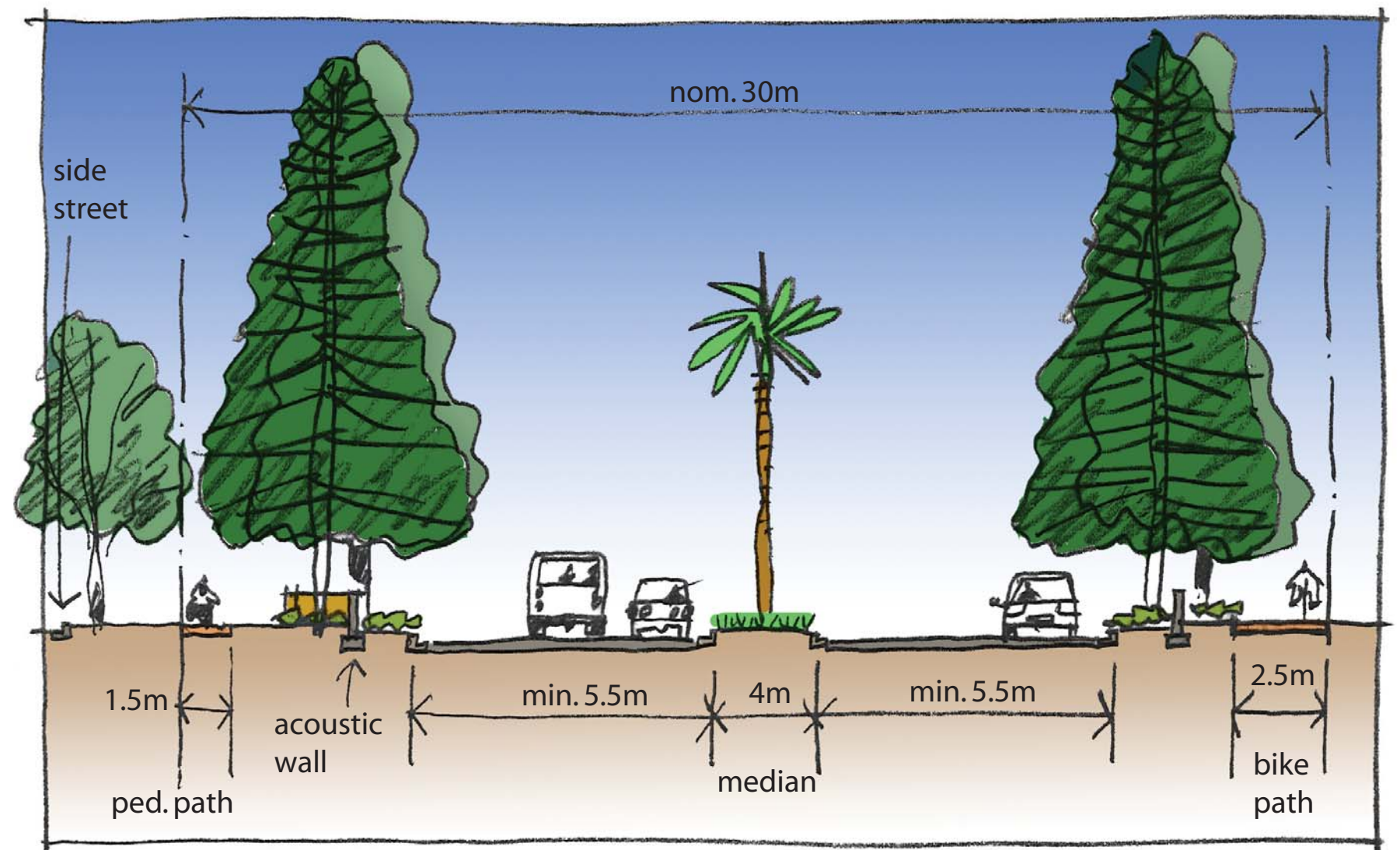
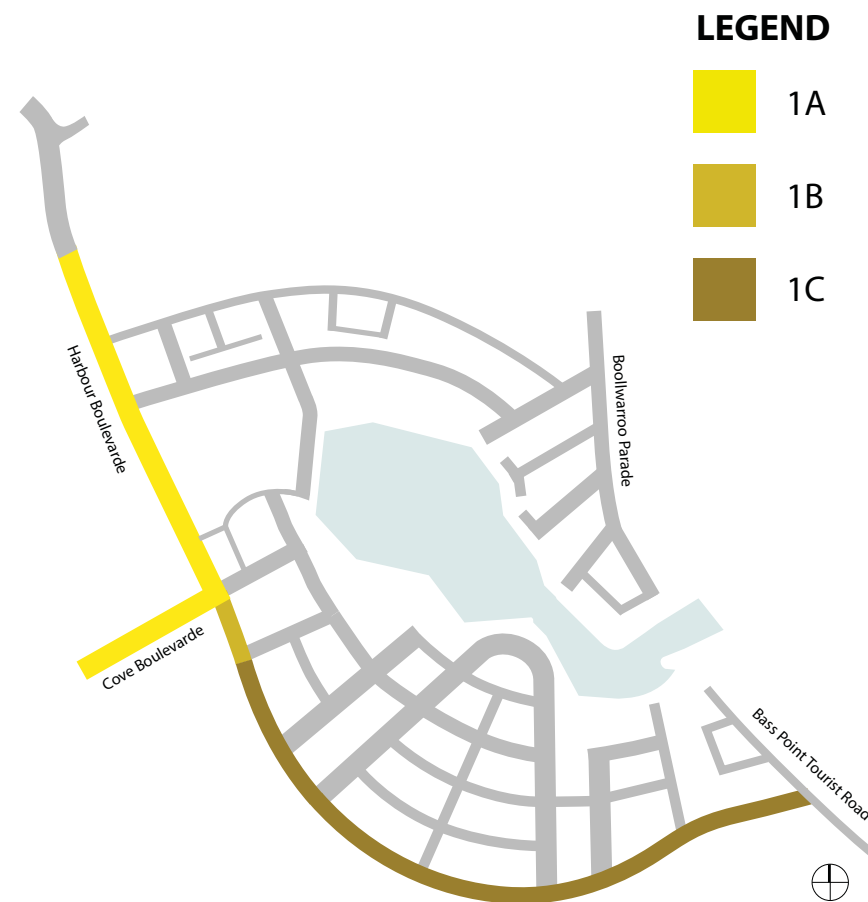


Fig. 03 - Avenue 1A Section



Avenue 1B

- Continuation of 1A as main structural definition of harbour zone.
- One transit lane in each direction.
- Parallel on-street parking on outer edges of carriageway – same material as carriageway with line marked definition.
- No vehicle access to adjacent lots.
- Formal avenue planting in grassed verges on each side.
- Pedestrian footpath on the eastern side.
- Separate, combined pedestrian and main cycle path on the western side.

- Standard vertical kerb and gutter with bituminous concrete pavement.
- Street light poles at street edge with 'spill' for bike and pedestrian pathways.

Note:

Lots west of this road have formal address to it but are separated by the main bike path and some degree of retaining at the boundary.

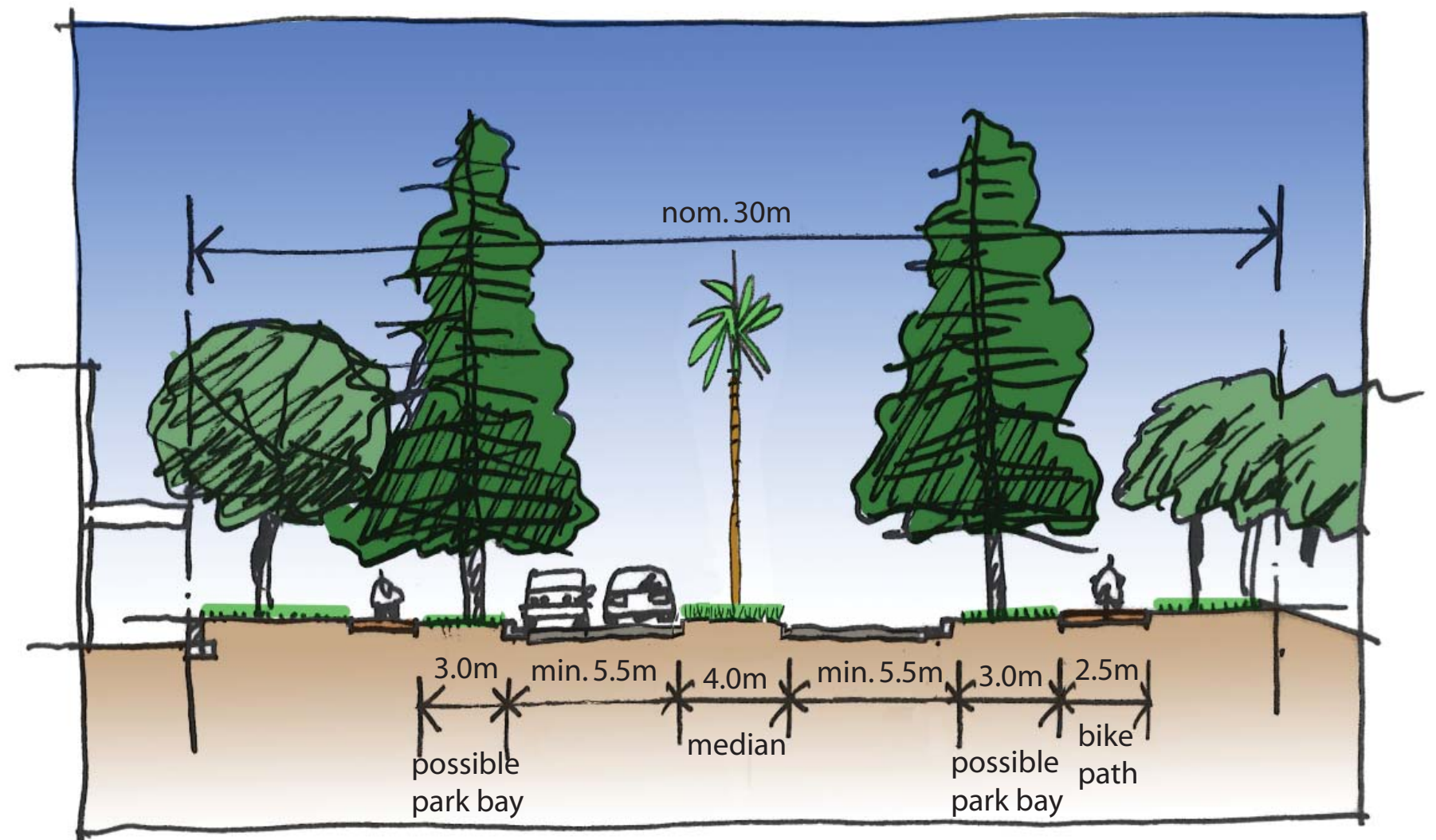
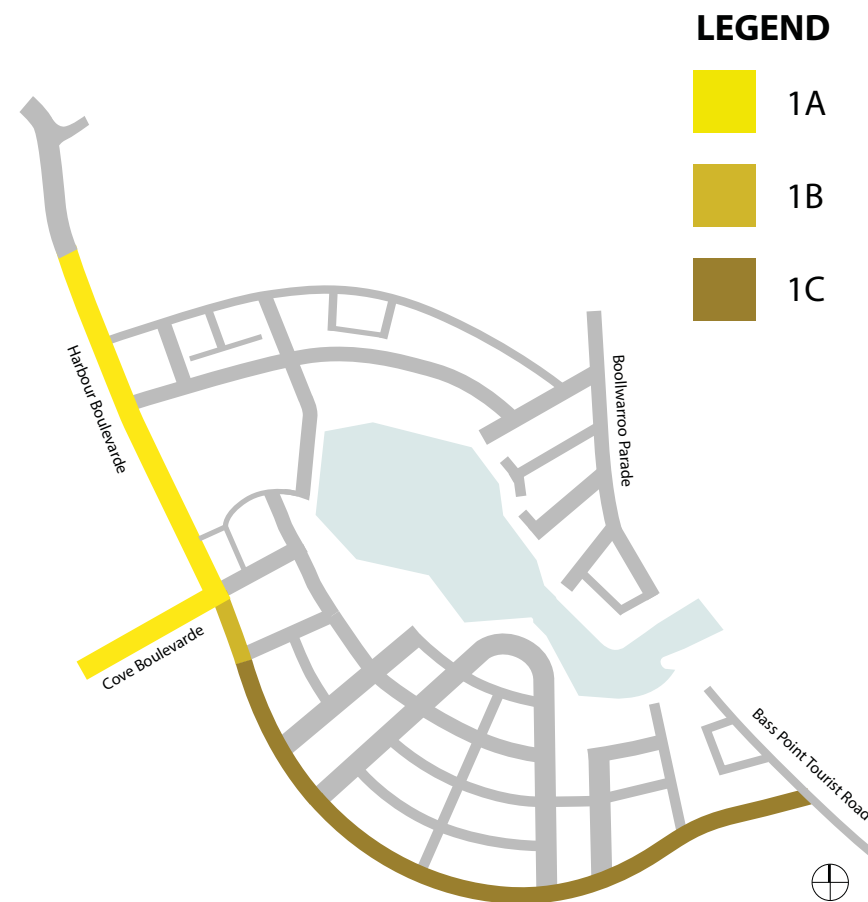


Fig. 04 - Avenue 1B Section



Avenue 1C

- Continuation of 1B as main structural definition of harbour zone (but with lesser volume/traffic density).
- One transit lane in each direction.
- Parallel on-street parking on outer edges of carriageway – same material as carriageway with line marked definition.
- Controlled vehicle access to adjacent lots north of Business Park entrance.
- Formal avenue planting in grassed verges on each side.
- Pedestrian footpath on the eastern side.
- Separate, combined pedestrian and main cycle path on the western side.

- Standard vertical kerb and gutter with bituminous concrete pavement.
- Street light poles at street edge with 'spill' for bike and pedestrian pathways.
- Formal address to lots on either side separated from road by main bike path on west (footpath on east) and retaining provision for cut and/or fill on boundary each side.

Note:

Includes vehicle access to lots on eastern side, south of Business Park entrance.

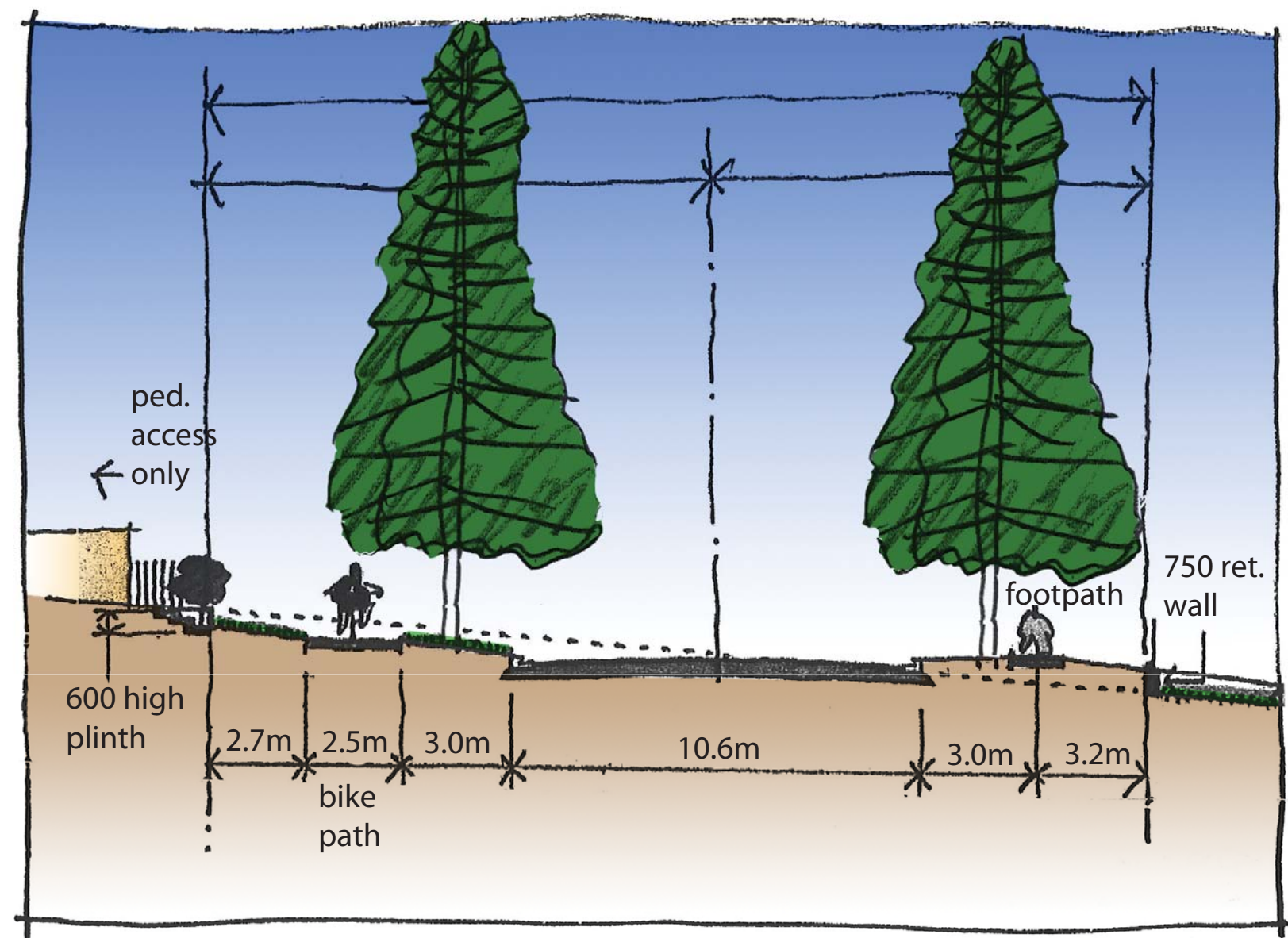
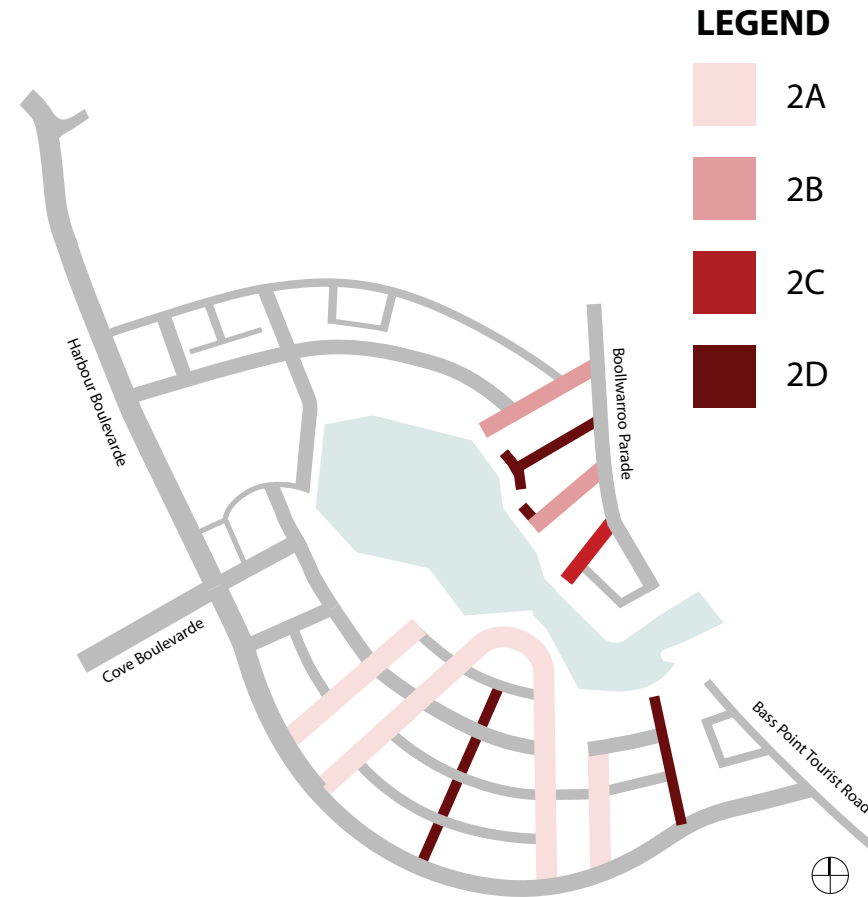


Fig. 05 - Avenue 1C Section



Visual Corridor 2A

- Broad boulevard providing long elevated views towards harbour.

Note:

Some interruption from tree canopies is not precluded.

- One transit lane in each direction with central median.
- Parallel on-street parking on outer edges of carriageway – same material as carriageway with line marked definition.
- Formal avenue planting in grassed verges on each side. Trees will have single tall trunks and generally open canopy.
- Pedestrian footpaths each side (except north side promontory).

- Standard vertical kerb and gutter on outer and flush kerb on medians.
- Road grades each side towards median which is planted with native grasses and groundcover shrubs and will serve as a water sensitive bio-swale.
- Street light poles at street edge with 'spill' for pedestrian pathways.
- Access to lots either side provided by driveway crossings in same material as footpaths.

Note:

Variations to verge and access conditions on outer edge of harbour 'promontory' (see Open Space Guidelines).

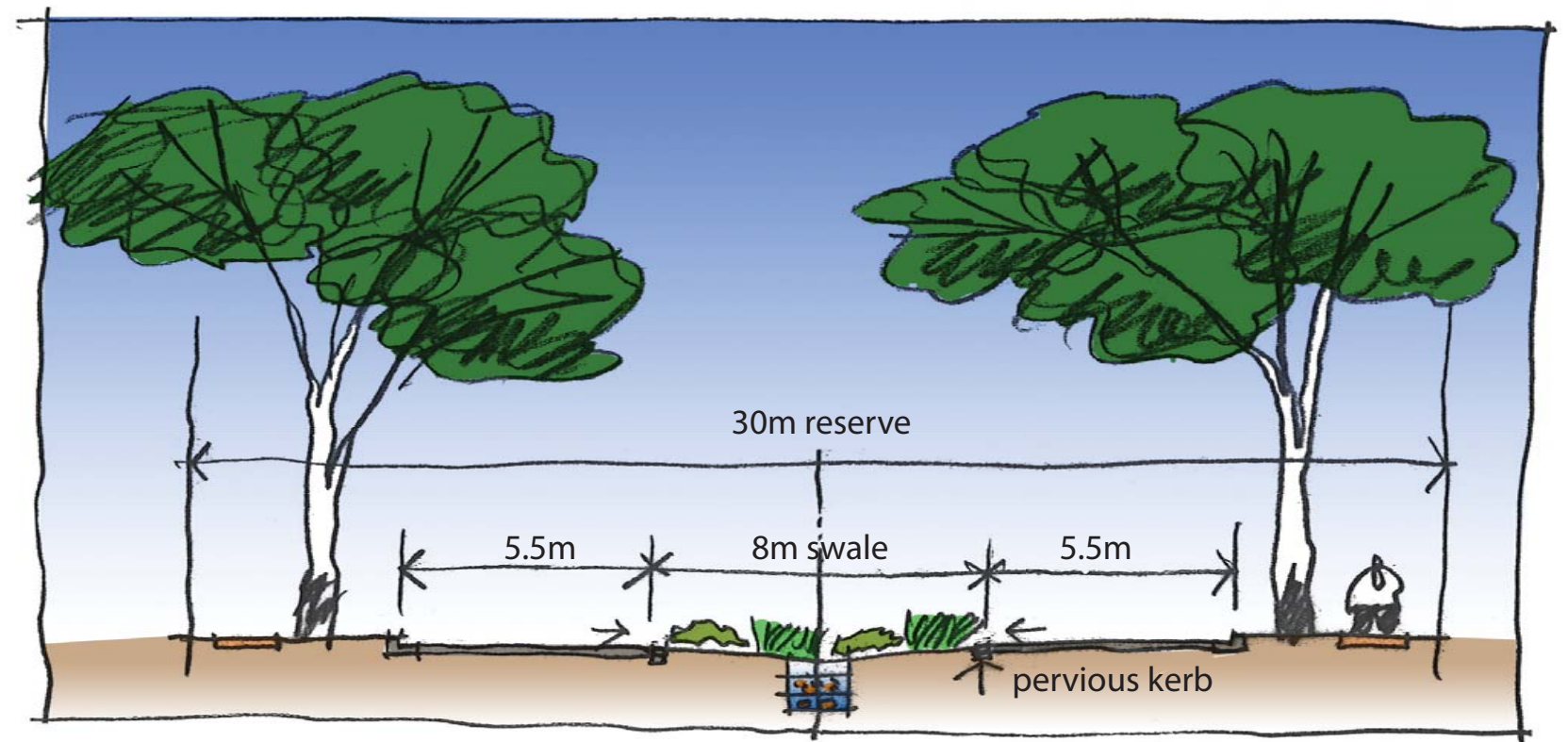
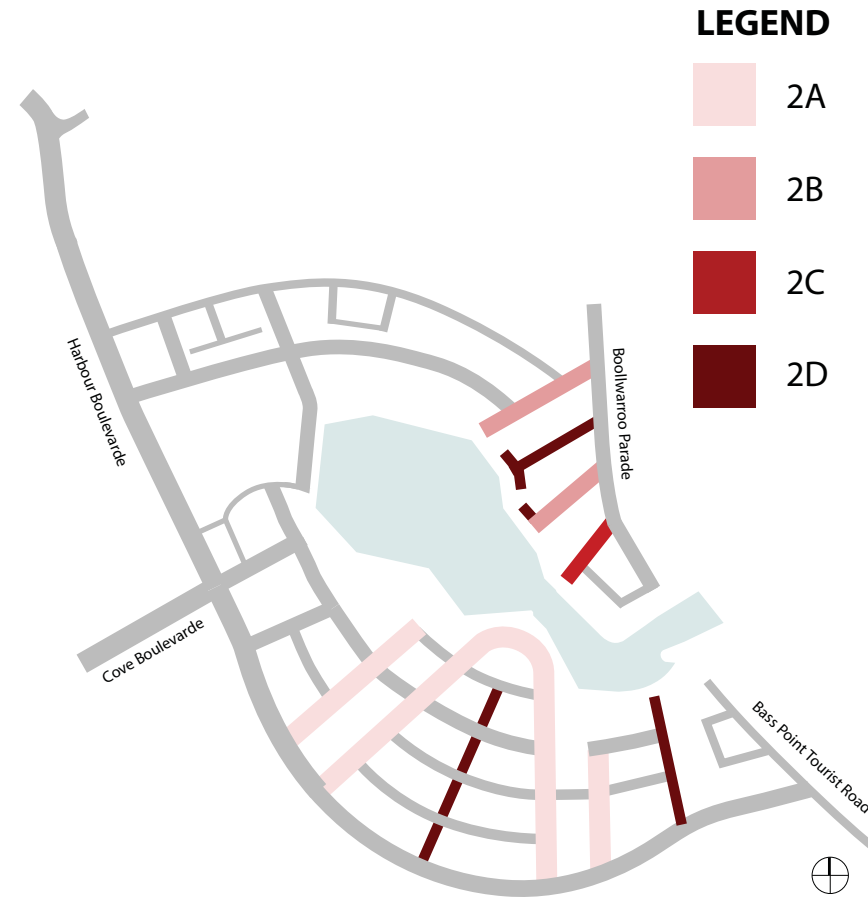


Fig. 06 - Visual Corridor 2A Section



Visual Corridor 2B

- Similar to 2A but without median separation (i.e. bio-swale functions) and without opportunity for elevated views.
- One transit lane in each direction.
- Parallel on-street parking on outer edges of carriageway – same material as carriageway with line marked definition.
- Formal avenue planting in irrigated grassed verge on each side.

Note:

Trees generally tall trunk/open canopy as described for 2A but street on same alignment as Cove Boulevard will also match species for same, i.e. Norfolk Island Pine.

- Pedestrian paths on each side.
- Standard vertical kerb and gutter.
- Street light poles at street edge with 'spill' for pedestrian pathways.
- Access to lots either side provided by driveway crossings in same material as footpaths.

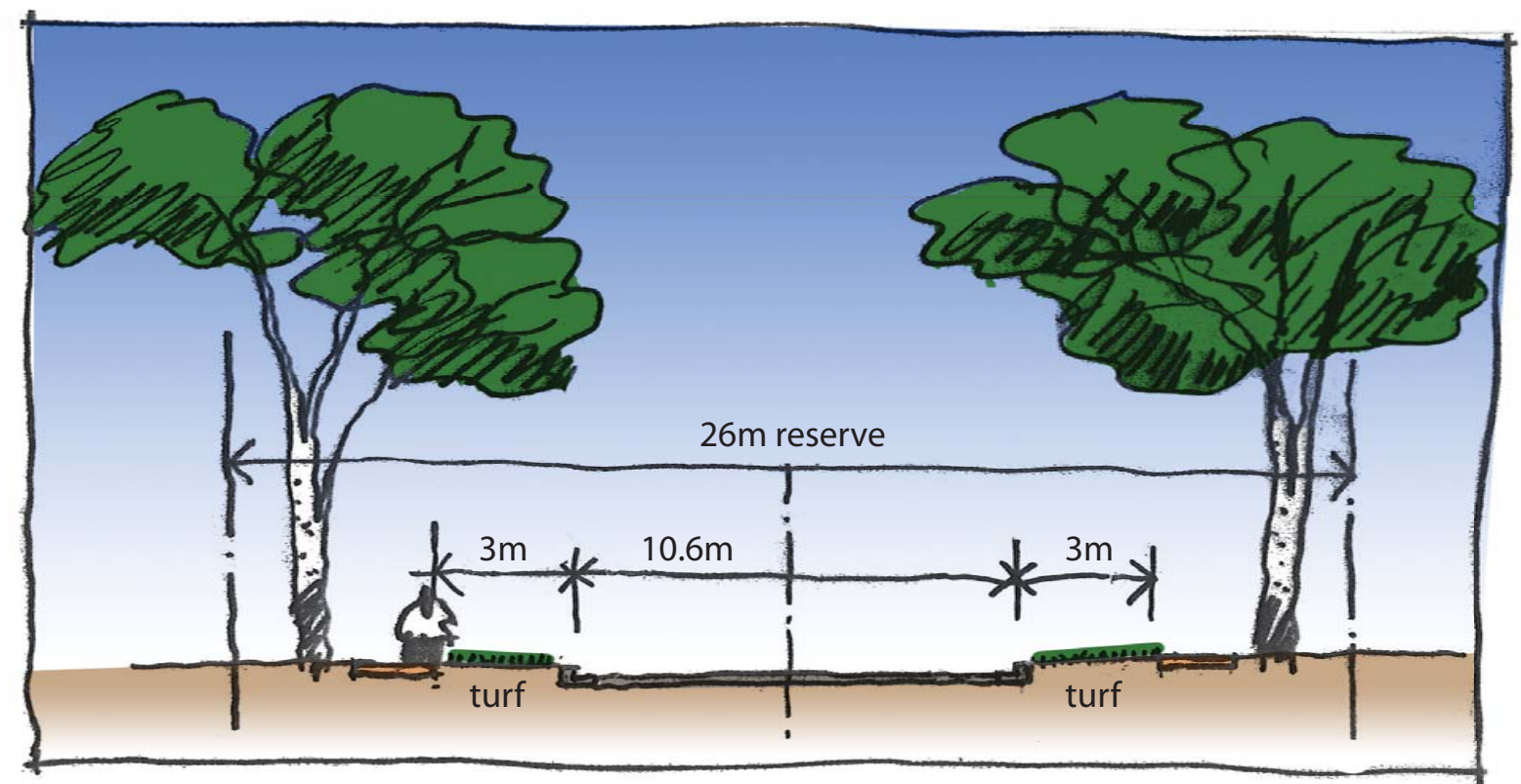
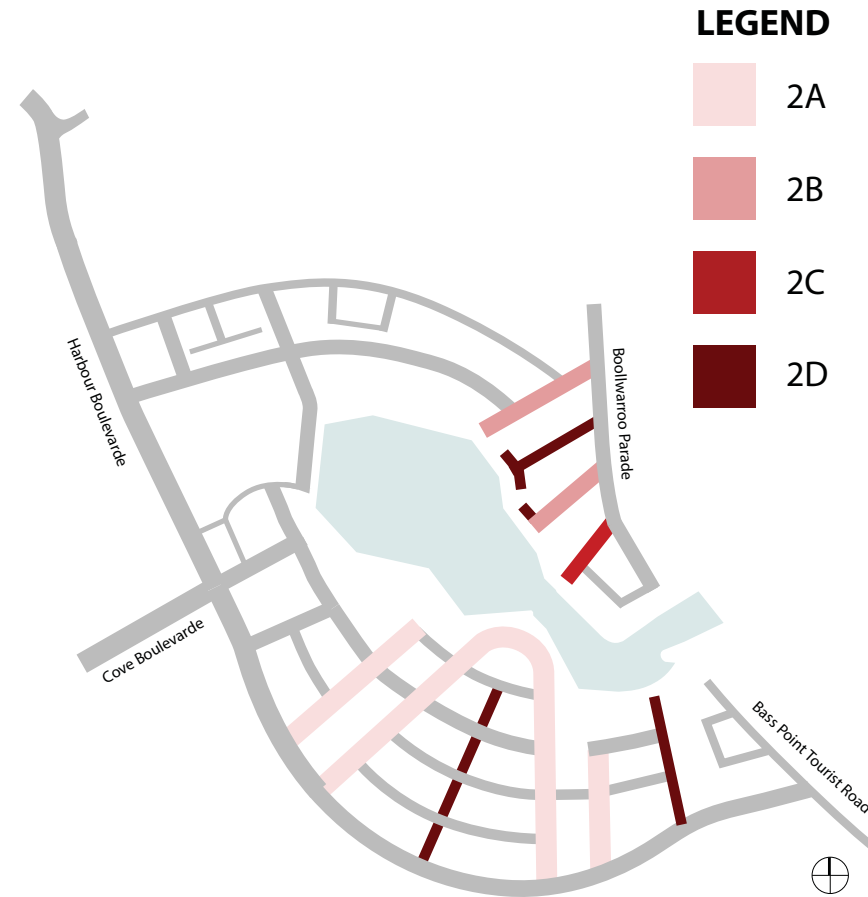


Fig. 07 - Visual Corridor 2B Section



Visual Corridor 2C

- Boulevard offering views to and from harbour zone and to the sea from higher elevations.
- One transit lane in each direction.
- Parking in parallel parking bays on outer edges of carriageway – same material as carriageway.
- Formal avenue planting in grassed verges on each side with additional tree and groundcover planting in parking bay separations. Trees in latter to be decorative coastal edge species eg. Banksia or Tuckeroo.
- Pedestrian paths each side.
- Street light poles at street edge with 'spill' for pedestrian pathways.
- Vehicle access to lots either side provided by driveway crossings in same material as footpaths.

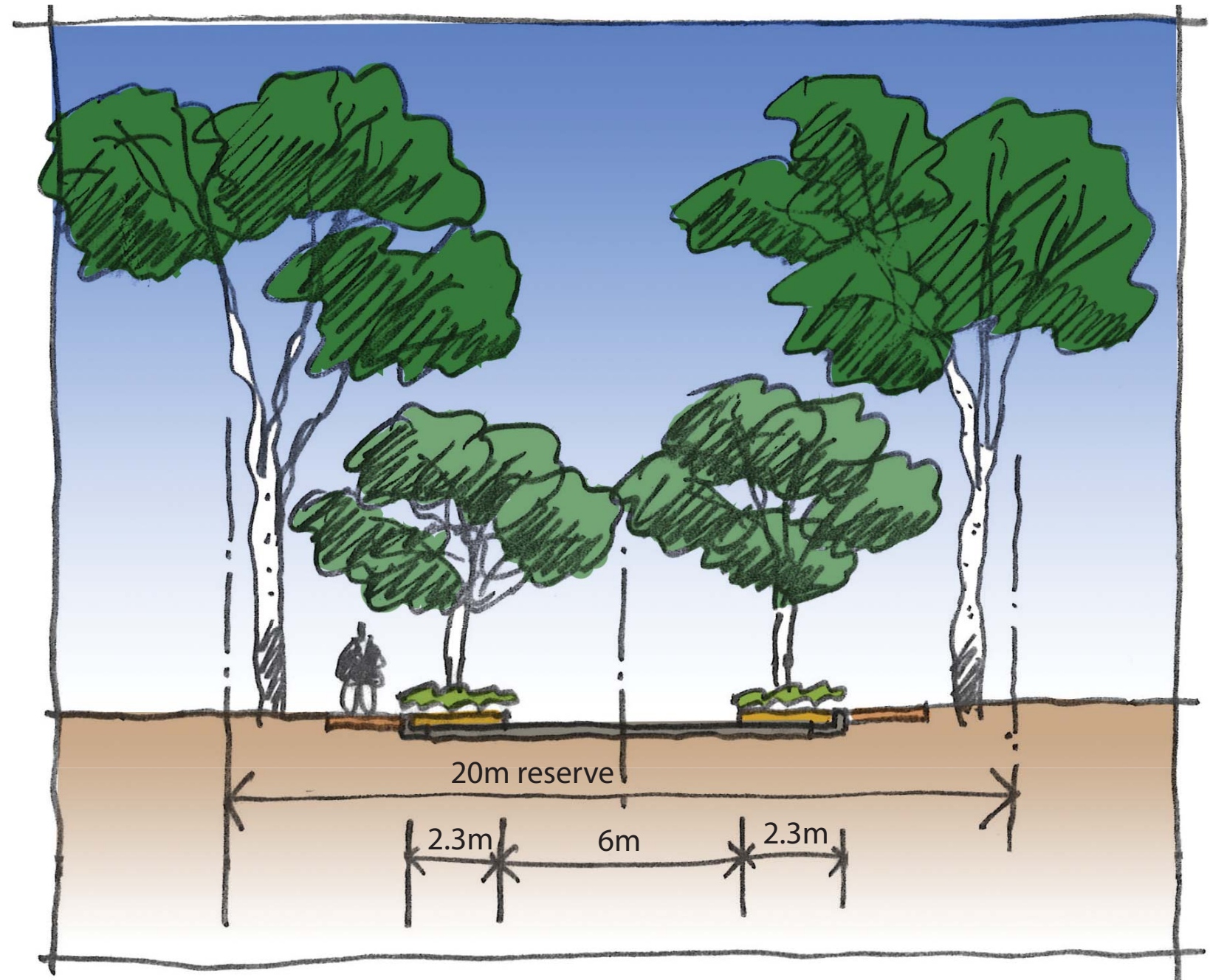
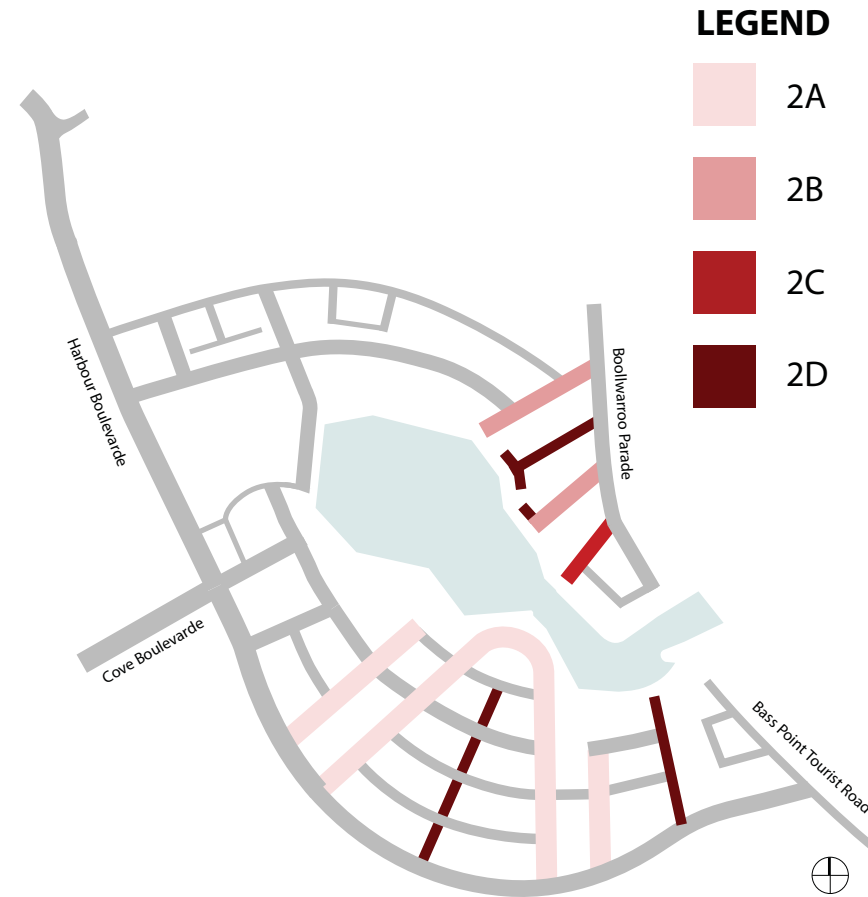


Fig. 08 - Visual Corridor 2C Section



Visual Corridor 2D

- Narrow boulevard offering views to harbour especially from higher elevations.

Note:

Adjacent southern boat trailer parking area carriageway offset to exclude standard verge which contains a bio-swale function (see Open Space Guidelines).

- One transit lane in each direction.
- Parallel on-street parking on outer edges of carriageway – same material as carriageway with line marked definition.

- Pedestrian path on residential side only.
- Standard vertical kerb and gutter on residential side with flush kerb on swale side to facilitate drainage to it.
- Formal avenue planting in grassed verges on both sides.
- Vehicle access to lots either side provided by driveway crossings in same material as footpaths.

Note:

On southern (trailer parking) side, verge merges with swale (see Open Space Guidelines).

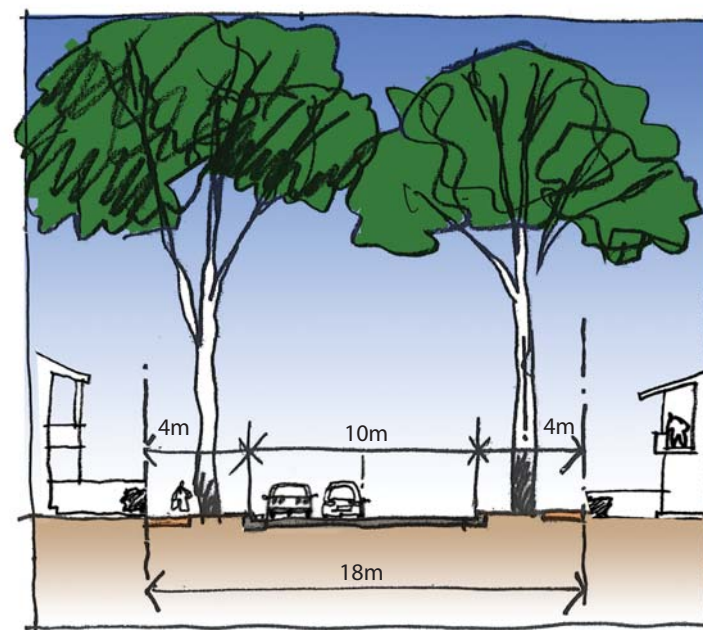


Fig. 09 - Visual Corridor 2D Section

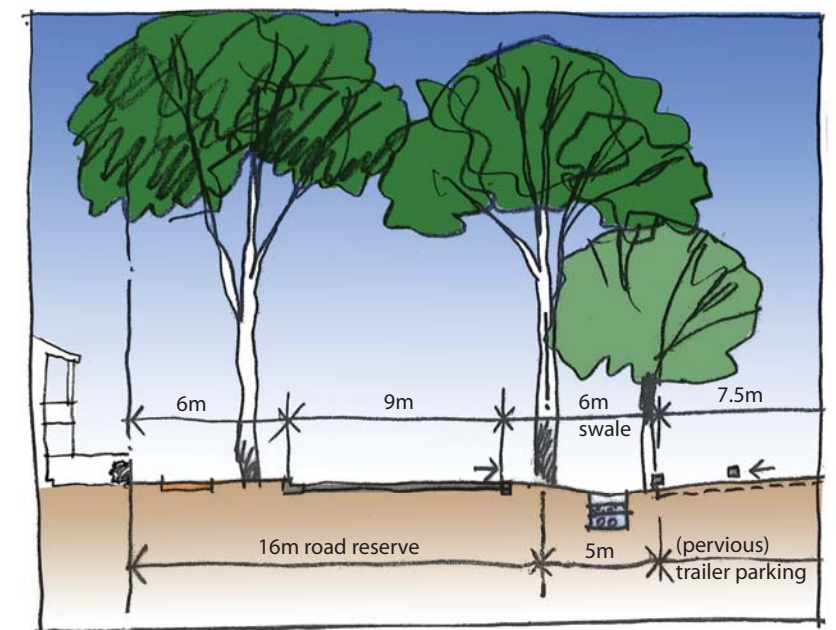
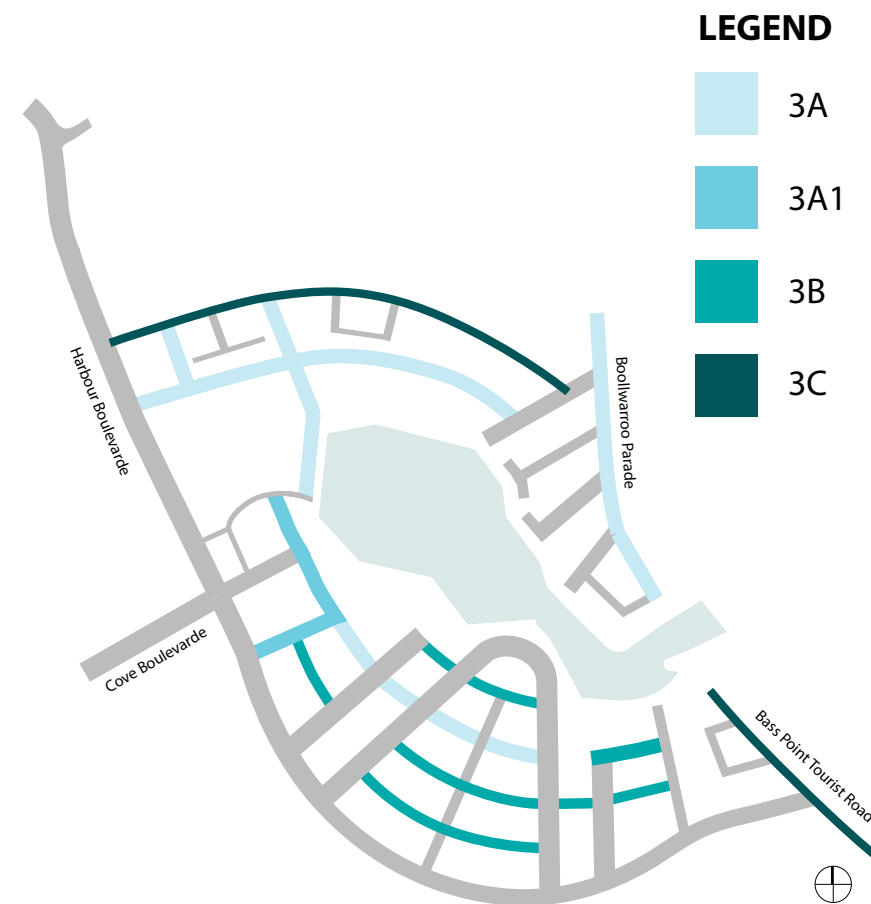


Fig. 10 - Visual Corridor 2D Section Boat Ramp Access Road



Connecting Street 3A

- Main street connections generally concentric with the harbour edge. Structural function similar to avenues (type 1) but with distinctive character.

Note:

In the case of streets 'connecting' with Shellharbour Village, the intention is less on physical than visual connectivity.

- Single transit lane in each direction.
- Parallel on-street parking on outer edges of carriageway – same material as carriageway with line marked definition.

- Formal avenue planting on each side of carriageway with trees against kerb and additional groundcover/native grasses in designated bays. Consider use of other grass alternatives eg. gravels, succulents etc.
- Pedestrian pathways each side.
- Standard vertical kerb and gutter.
- Street light poles at street edge with 'spill' for pedestrian pathways.
- Vehicle access to lots either side provided by driveway crossings in same material as footpaths.

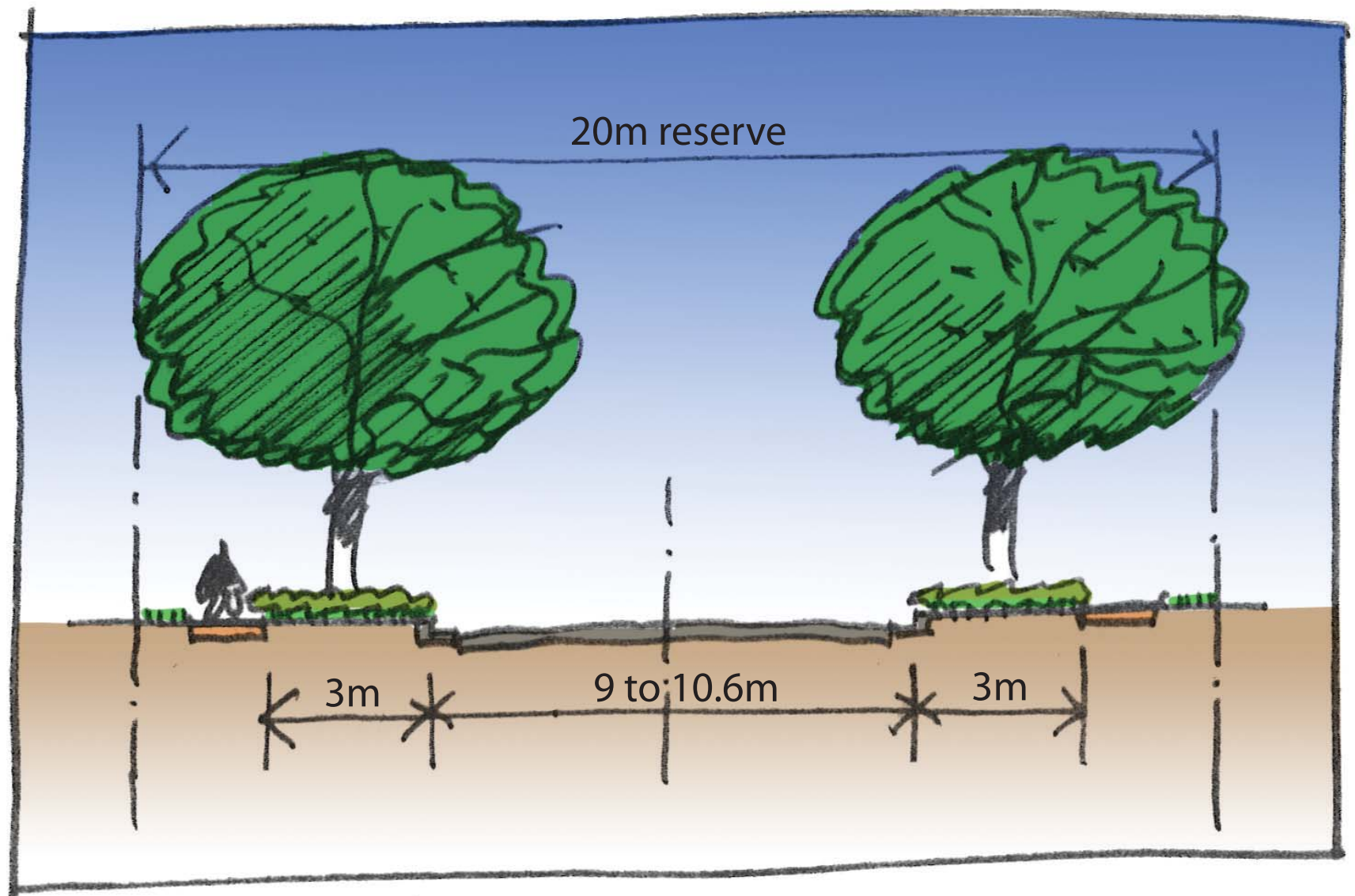
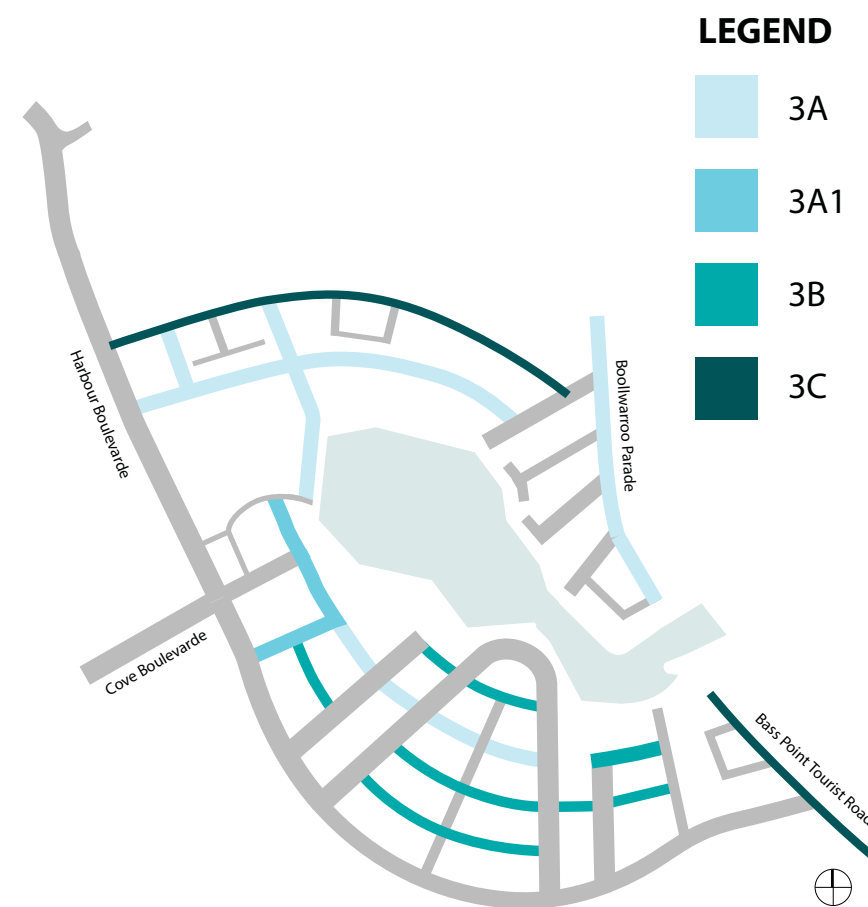


Fig. 11 - Connecting Street 3A Section



Connecting Street 3A1

- Generally extension of 3A but with more urban feel – no driveway access.
- Single transit lane in each direction.
- Parking in designated bays on outer edges of carriageway – same material as carriageway.
- Formal avenue and shade tree planting in parking bay separations on each side of carriageway, with additional groundcover.

- Full paved 'verge' in lieu of pedestrian pathway strips, with additional grass/groundcover apron at residential frontages.
- Standard vertical kerb and gutter at footpath and parking bay separations.
- Street light poles at street edge with 'spill' for pedestrian pathways.

Note:

Additional non-standard details occur in the vicinity of Harbour Square and Road C both within the Town Centre (see Open Space Guidelines).

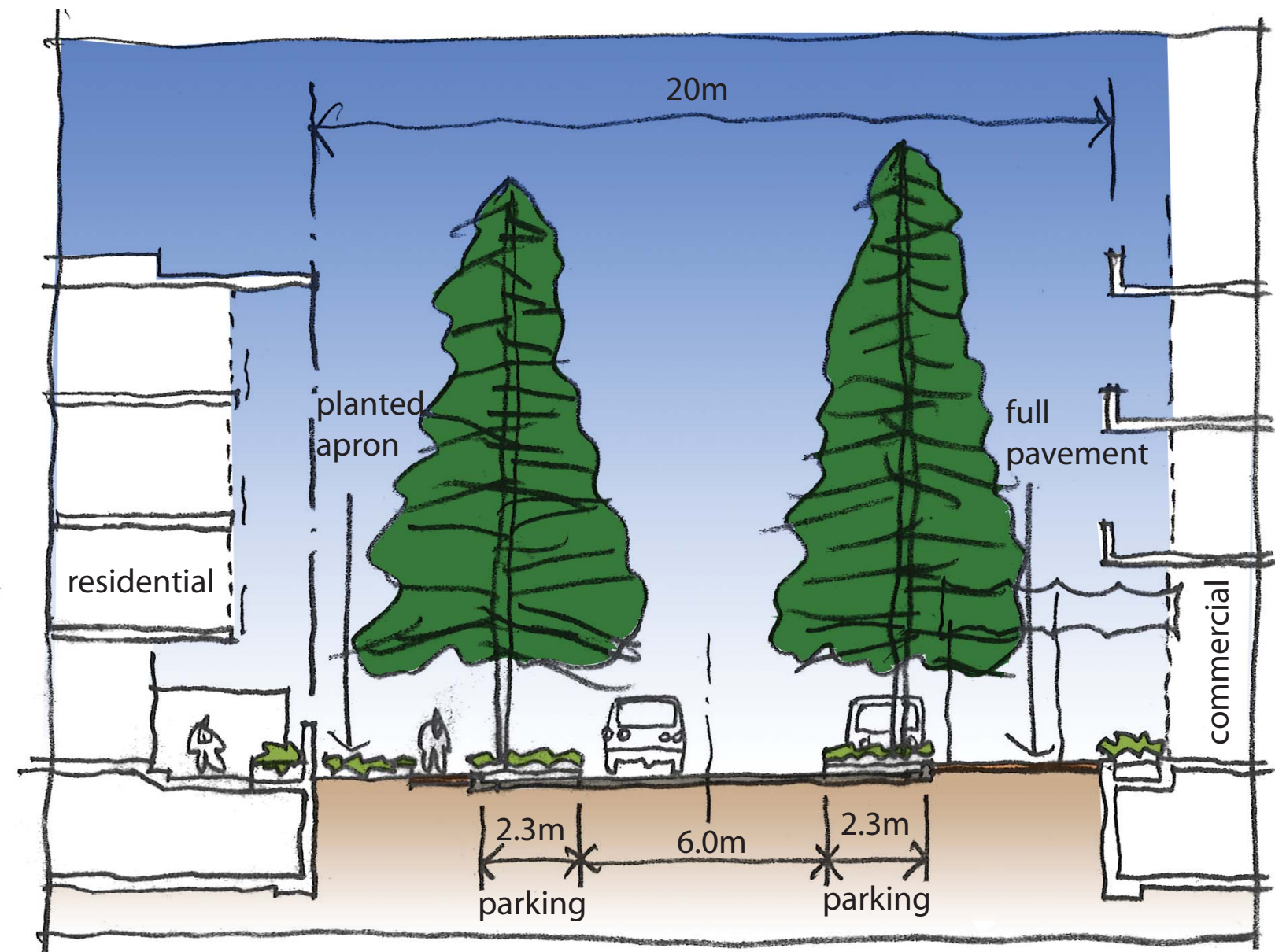
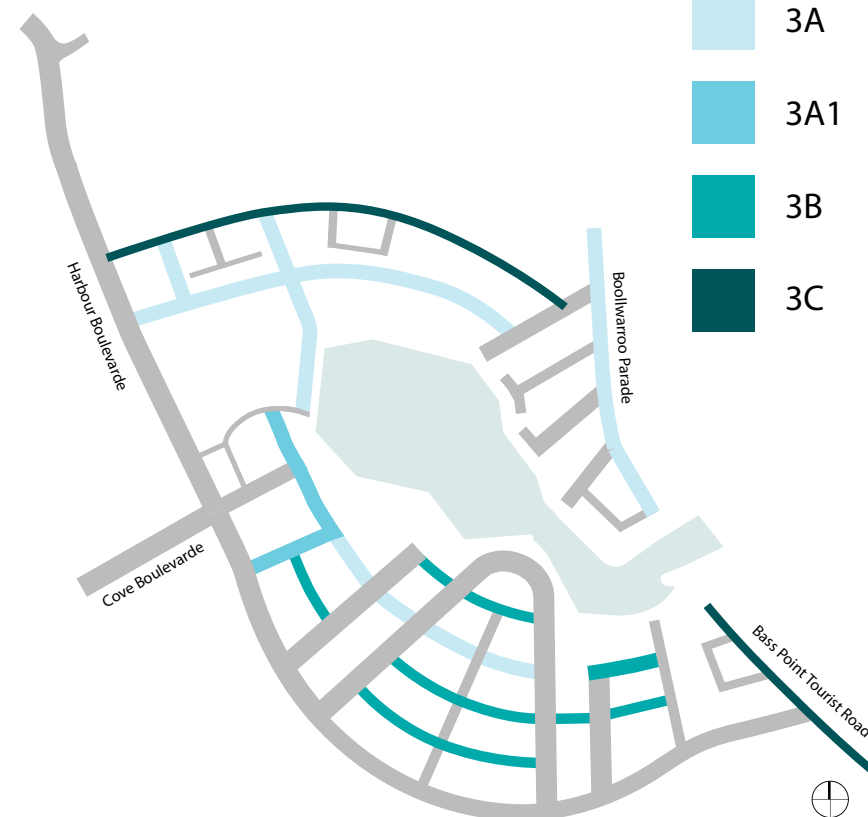


Fig. 12 - Connecting Street 3A1 Section



LEGEND

- 3A
- 3A1
- 3B
- 3C

Connecting Street 3B

- Lower priority versions of 3A with a distinctly residential feel and scale.
- Single transit lane in each direction.
- Nominal parking on one side only, in parallel format.
- Small scale avenue planting on each side of carriageway with trees against kerb. Grassed verge.
- Pedestrian pathways each side.
- Layback kerb and gutter.
- Street light poles at street edge with 'spill' for pedestrian pathways.
- Vehicle access to lots either side provided by driveway crossings in same material as footpaths.

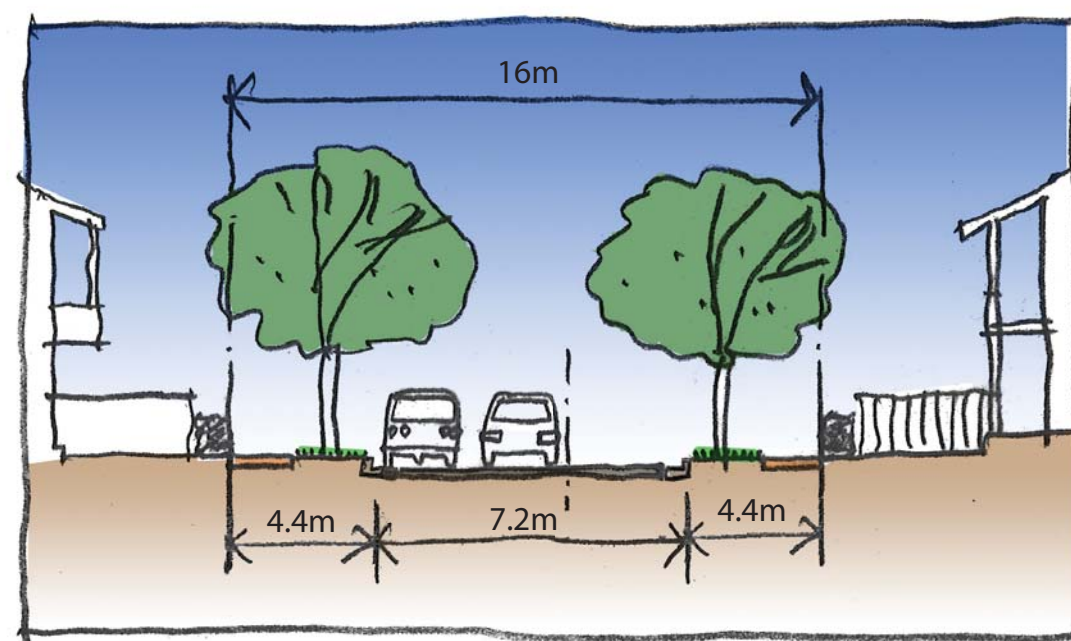


Fig. 13 - Connecting Street 3B Section

Connecting Street 3C

- Minor street generally with residential address to one side only.
- Single transit lane in each direction.
- Parking one side only, parallel format, unmarked.
- Tree planting generally formal on residential address side, informal on swale or open space/reserve side where circumstances permit.
- Pedestrian path on residential side only, grassed verge.
- Layback kerb and gutter on residential side and flush kerb on swale/reserve side where appropriate to drainage requirements.
- Street light poles against kerb on footpath/residential side.
- Vehicle access to lots either side provided by driveway crossings in same material as footpaths.

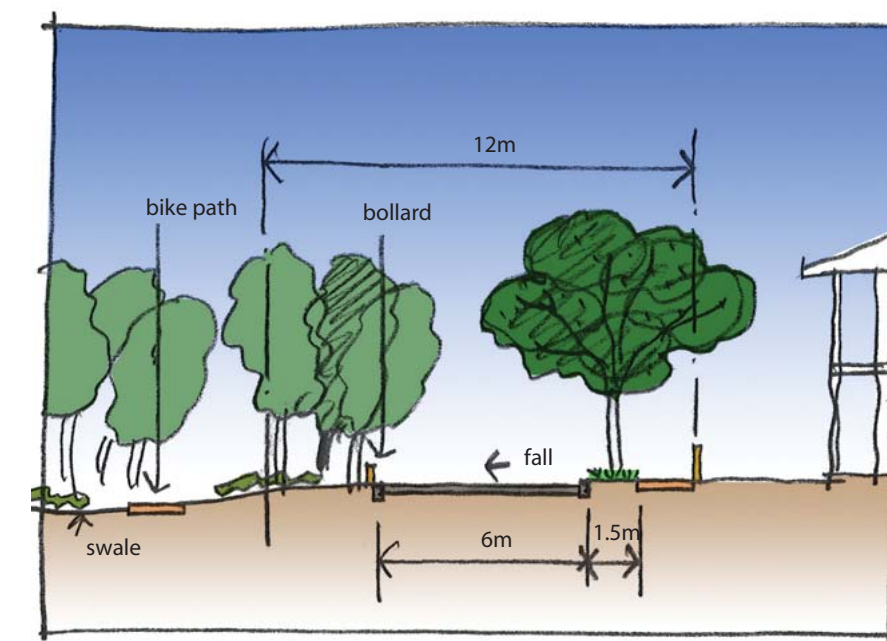
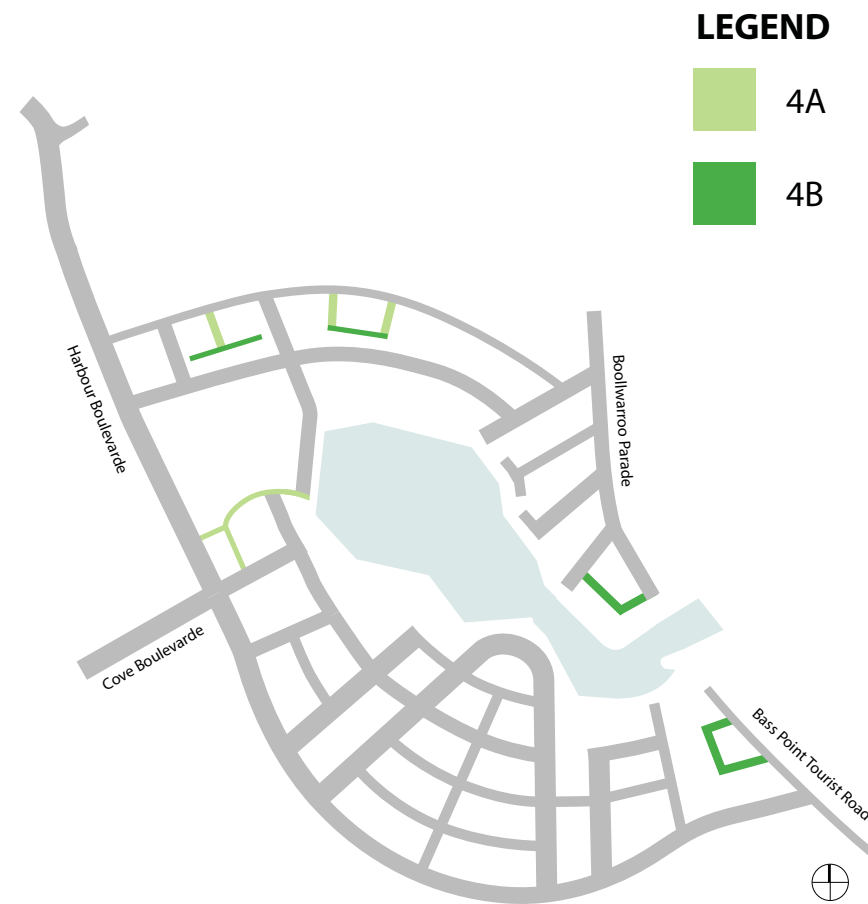


Fig. 14 - Connecting Street 3C Section



Minor Streets 4A

- Street with one transit lane in each direction or with one-way transit lane on one side and parallel parking lane on the other.
- Small scale formal street tree planting on each side of carriageway and grassed verge.
- Generally footpath on both sides or where residential access warrants.
- Layback kerb and gutter.
- Street light poles at street edge with 'spill' for pedestrian pathways.
- Vehicle access to lots either side provided by driveway crossings in same material as footpaths.

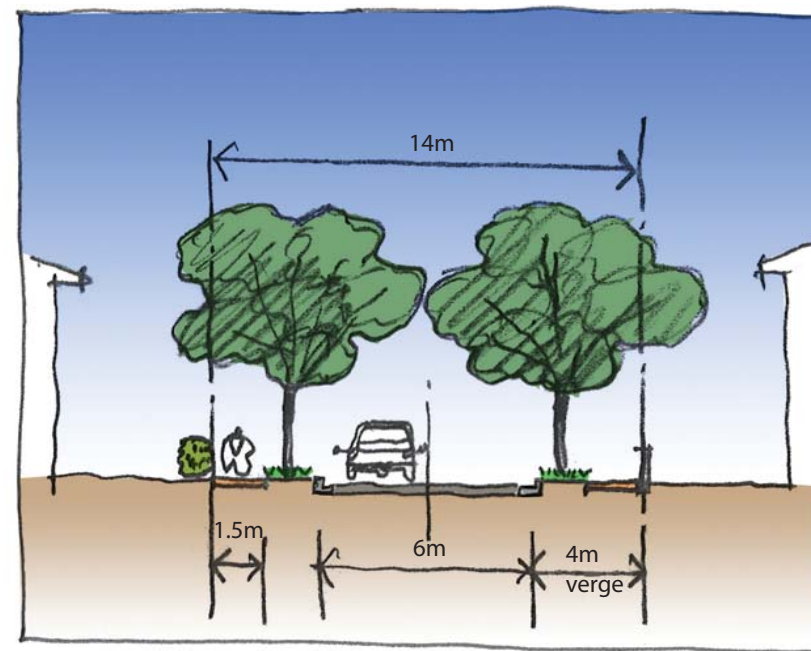


Fig. 15 - Minor Streets 4A Section

Minor Street 4B

- Laneway with variable width carriageway (max 6.0m, min 4.5m) to allow for informal planting pattern to suit individual access requirements.
- Generally two way access.
- No parking requirements.
- Small scale informal tree planting in dedicated beds with additional groundcover plantings.
- Emphasis on pedestrian safety and surveillance issues.
- No pedestrian footpaths.
- Flush kerb associated with unit paved carriageway.
- Sump and/or absorption pit drainage (in beds).
- Small scale lamp-type lighting on standards.
- Driveway access integral with road pavement.

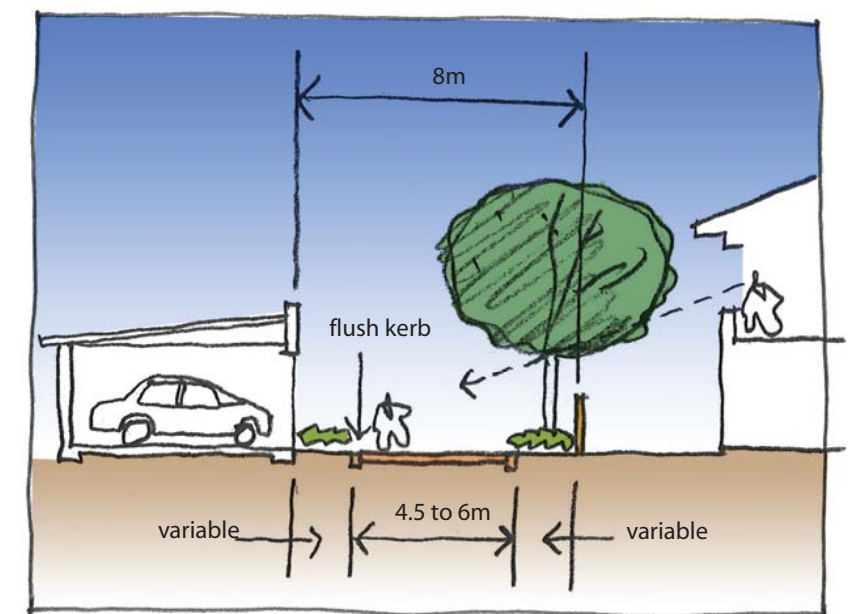
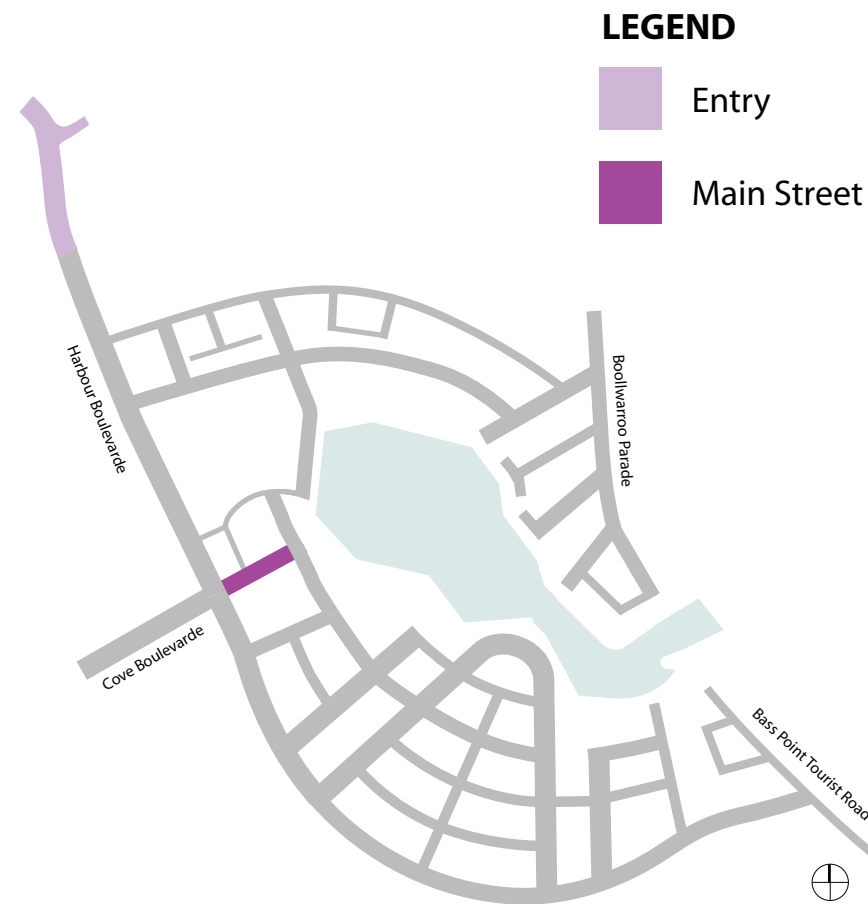


Fig. 16 - Minor Streets 4B Section



Entry

- Main entry to Precinct from north, merging with Harbour Boulevard. Incorporates new 'gateway' element and character of existing (protected) trees between Bowling Club entrance and Shellharbour Road.
- Up to six transit lanes including right/left turn stacking at Addison Street. Lights and service lane intersection.
- No vehicle access to adjacent lots.
- Parking prohibited.
- Narrow planted median separation containing Doryanthes (Gynea lily) or other suitable accent plant.
- Acoustic devices (walls) on residential side of carriageway, associated with continuous border and gateway planting.
- Gateway feature subject to further detailed design but conceptually as a broad crescent incorporating local stone and acoustic functions at least on the eastern side where against existing residential lots.
- Informal verge (and wider) plantation reflecting character of existing protected tree stand.
- Pedestrian footpath on east side incorporated in acoustic and landscape treatments.
- Main bike path on west side carefully routed between existing trees in verge space.
- Street light poles at street edge.
- Separate (eg. bollard) lighting where required for bike and/or pedestrian path.
- Possible special lighting for entry feature.
- Standard vertical kerb and gutter on outer carriageway and at median.

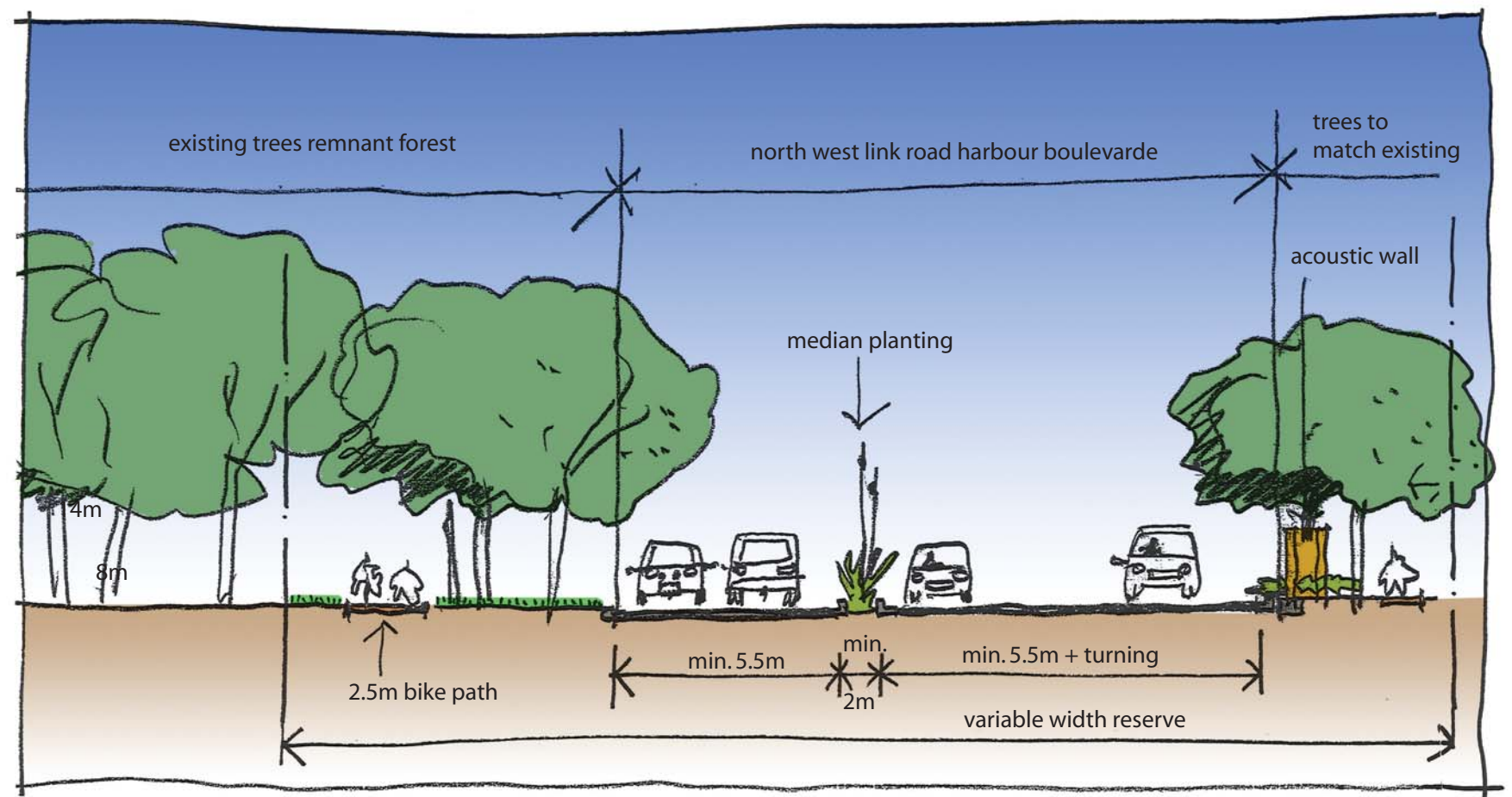
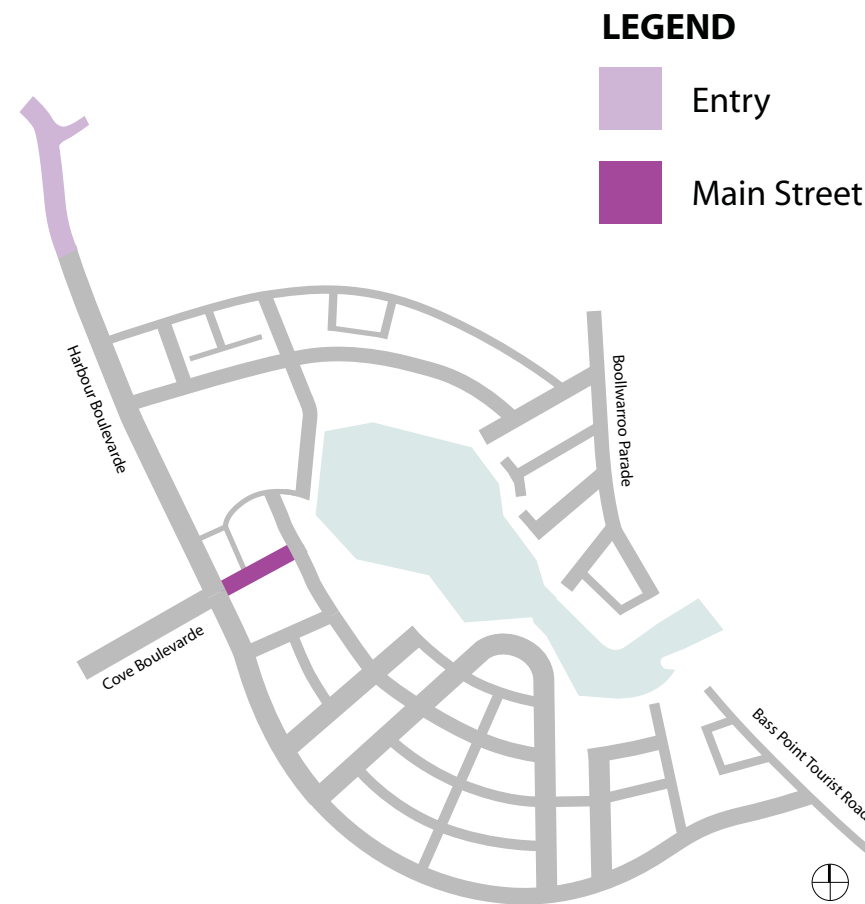


Fig. 17 - Entry Section



LEGEND

- Entry
- Main Street

Main Street

- Main focus of commercial activity with emphasis on pedestrian comfort and urban character, views to water.
- One transit lane in each direction.
- Parallel parking each side of carriageway in dedicated bays to match street tree pattern.
- Continuation of Norfolk Island Pine planting in parking bay separations, and cabbage tree palms in pedestrian pavement zones.
- Full paved pedestrian areas with additional 'planters' for palm and groundcover, generally to suit sheltered outdoor eating/drinking uses/street furniture. Consider variation in pavement colour/pattern to reflect the usage required.
- Special light standards to suit pavement layout/pattern. Consider dual usage for banners, flags etc. Consider lighting from shopfronts and other non-direct sources.

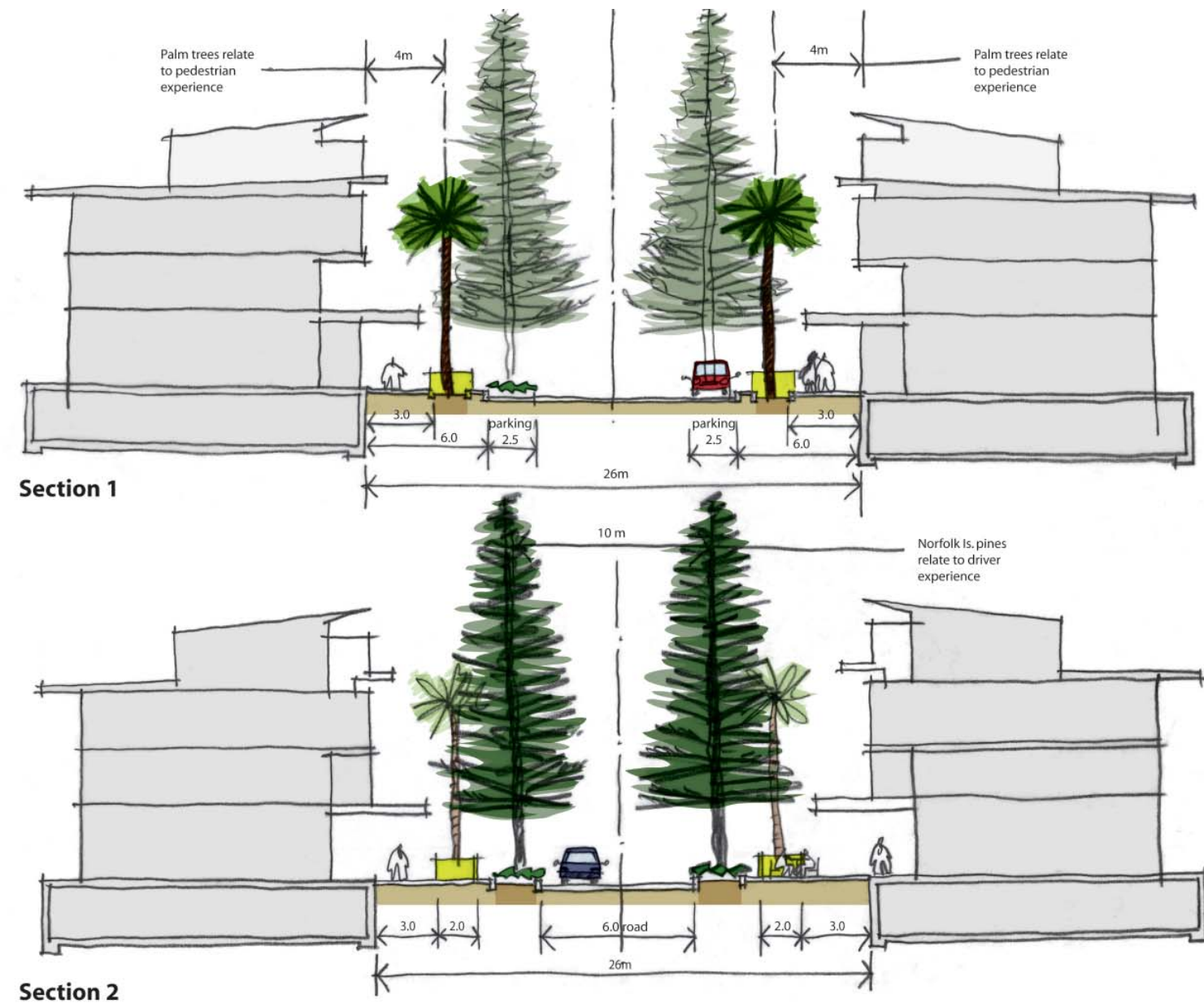


Fig. 18 - Main Street Sections