



**Shell Cove
Boat Harbour Precinct**

**Concept Plan Application
and Environmental Assessment
Appendix N - Open Space Guidelines**

prepared by

LFA (Pacific) Pty Ltd

date

February 2010





Shell Cove Boat Harbour Precinct

Draft Conceptual Open Space 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.

Schedule of Figures

Fig. 01 - Open Space Network	1
Fig. 02 - Public Boat Ramp and Trailer Parking	2
Fig. 03 - Trailer Parking Section	2
Fig. 04 - Harbour Edge Section	2
Fig. 05 - Harbour Edge South	3
Fig. 06 - Harbour Edge South Section	3
Fig. 07 - The Promontory	4
Fig. 08 - The Promontory Section	4
Fig. 09 - Harbourside West Park	5
Fig. 10 - Harbourside West Pak Section	5
Fig. 11 - South Boardwalk	6
Fig. 12 - Central Park	7
Fig. 13 - Central Park Section	8
Fig. 14 - Main Street/Road B Junction	9
Fig. 15 - Main Street/Road B Junction Aerial Perspective	9
Fig. 16 - West Boardwalk	10
Fig. 17 - West Boardwalk Section	10
Fig. 18 - North Boardwalk	11
Fig. 19 - North Boardwalk Section	11
Fig. 20 - Harbourside North Park	12
Fig. 21 - Harbourside North Park Sections	12
Fig. 22 - Harbourmouth Promenade	13
Fig. 23 - Harbourmouth Promenade Section	13
Fig. 24 - Floodway	14
Fig. 25 - Floodway Section	14
Fig. 26 - Wetland	15
Fig. 27 - Wetland Section	15

Table of Contents

Introduction	1
Open Space Network	2
• Public Boat Ramp and Trailer Parking	2
• Harbour Edge South	3
• The Promontory	4
• Harbourside West Park	5
• South Boardwalk	6
• Harbour Square	7
• The Crescent	9
• West Boardwalk	10
• North Boardwalk	11
• Harbourside North Park	12
• Harbourmouth Promenade	13
• Floodway	14
• Wetland	15

<p>Notes: LFA (Pacific) Pty Ltd. All rights reserved. This work is covered by copyright and cannot be reproduced or copied in any form or by any means without written permission of LFA (Pacific) Pty Ltd.</p>	Rev	Amendments	Date	 <p>Architects Urban Planners Landscape Architects Interior Designers</p> <p>LFA (Pacific) Pty Ltd ABN 92 630 134 905</p> <p>PO BOX 259, Edgediff NSW 2027 Suite 4/2 New McLean Street Edgediff NSW 2027</p> <p>T 02 9327 6822 F 02 9327 5554 E lfa@lfa.com.au W www.lfa.com.au Nominated Architects: Alf Lester No. 2128 Stephen Anders No. 5764</p>		Project	Shell Cove Boat Harbour Precinct - Draft Conceptual Open Space Guidelines
	1	Draft # 1 (pdf)	12-10-09			Project Status	Ongoing
	2	Draft # 2 (pdf)	27-10-09			Project Director	Alf Lester
	3	Submission to the DoP for the 'test of adequacy'	10-11-09			Checked by	AL
						Date Issued	
						Issue Type	
						Client	 
				In Conjunction with			

Introduction

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 open space areas as follows:

- Public Boat Ramp and Trailer Parking
- Harbour Edge South
- The Promontory
- Harbourside West Park
- South Boardwalk
- Harbour Square
- Main Street/Road B Junction
- West Boardwalk
- North Boardwalk
- Harbourside North Park
- Harbourmouth Promenade
- Floodway
- Wetland



Fig. 01 - Open Space Network

Open Space Network

Public Boat Ramp and Trailer Parking

Principles

Primarily for providing public boat access to the harbour and temporary (daily) boat trailer/car parking. Nearest the harbour, open space required for turning and provision of limited short term parking will encourage more traditional recreational park uses.

Size

Trailer parking approximately 8,000m² (170m long x 48m wide including buffer and swale). Boat Ramp and foreshore park approximately 3,500m².

Features

- Contains bio-swale functions parallel with street verge on north west side and landscaped buffer to residential sector on eastern side.
- Parking for multiple cars with trailers attached. Aisle and car spaces paved and trailer sections grass and/or gravel or turf-pave to reduce stormwater runoff and increase infiltration. Line marked in paved sections and bollards in grass/gravel.
- Informal picnic spaces within 'roundabout' turning and foreshore areas including park shelters.

- Allows for pedestrian access along foreshore (connecting to Bass Point Tourist Road).
- Furniture includes bench seating, lighting, garbage bins, (possibly BBQ's).
- Interpretive and educational signage.

Plant Palette

- Formal street tree planting on west side (see Street Guidelines, type 2D).
- Informal mixed species (*Melaleuca*, *Banksia* etc.) to landscaped buffer and swale areas reflecting coastal edge endemics.
- Informal mixed species (as above) and coastal shade/shelter trees in foreshore park zone.
- In same area, shrubs, groundcovers generally to merge with species on east side of Bass Point Tourist Road alignment.
- Grasses in picnic areas, elsewhere native grasses and succulents reflecting coastal edge condition.

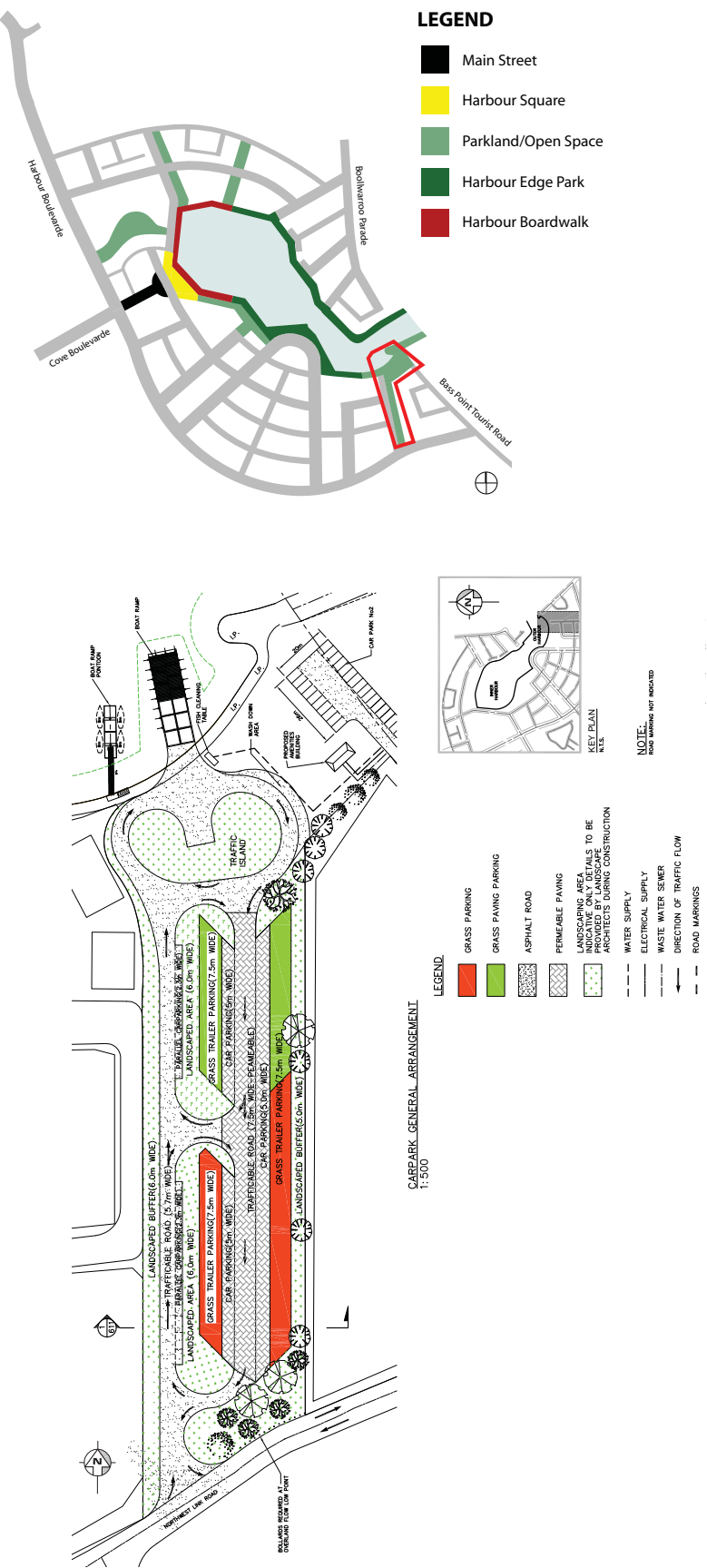


Fig. 02 - Public Boat Ramp and Trailer Parking

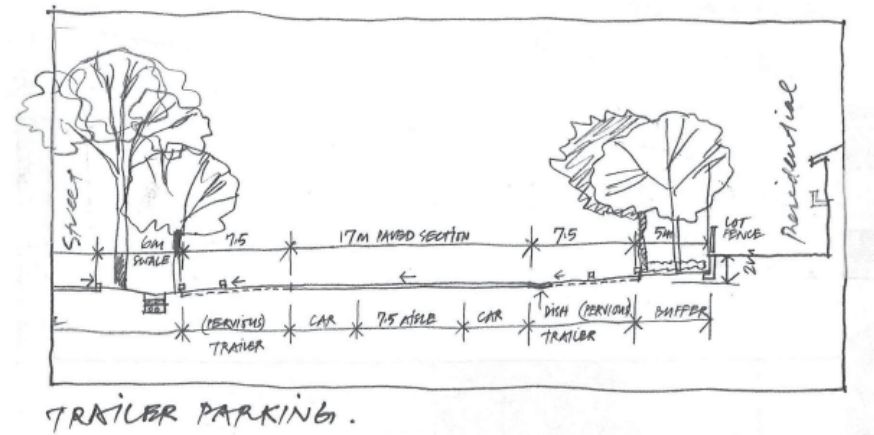


Fig. 03 - Trailer Parking Section

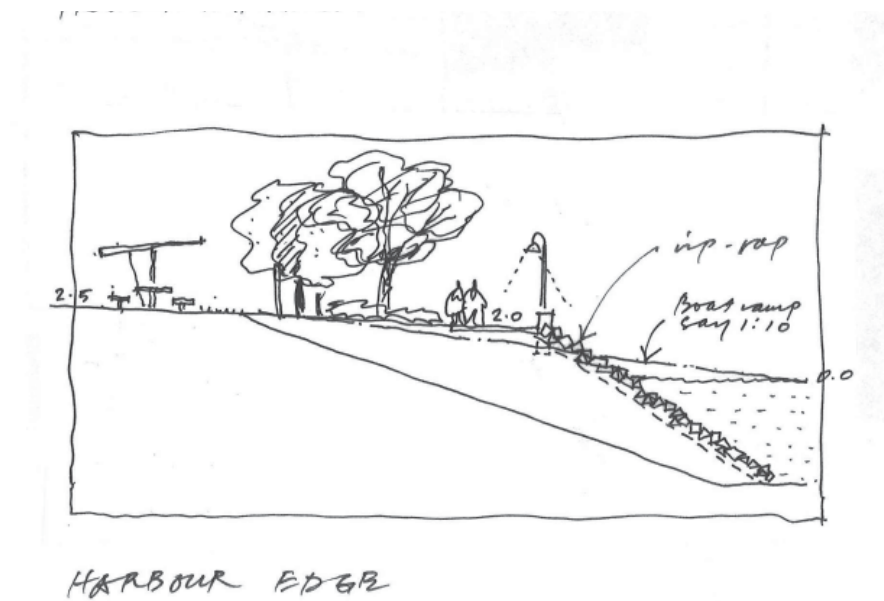
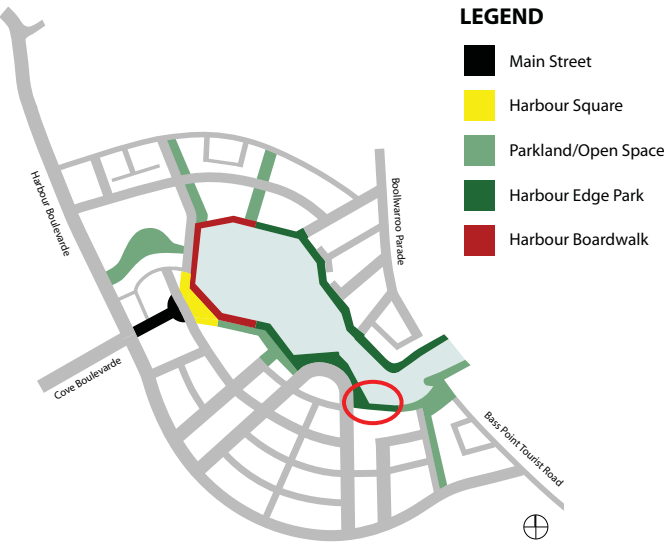


Fig. 04 - Harbour Edge Section

Harbour Edge South



Principles

Transition space between boat maintenance facilities and hard edged Promontory. Views directly out to harbour mouth but potentially open to southerly weather. Generally a relaxed character.

Features

- Gravel paved promenade with stone bollard separation at harbour edge.
- Low stone retaining wall with sitting niches.
- Furniture includes bench seating, lighting, garbage bins.

Plant Palette

- Ficus macrophylla* above wall line separated by grassed lounging/sitting spaces.
- Grass (*kikuyu*) above wall line merges with street verge.
- Succulent species. in upper levels.

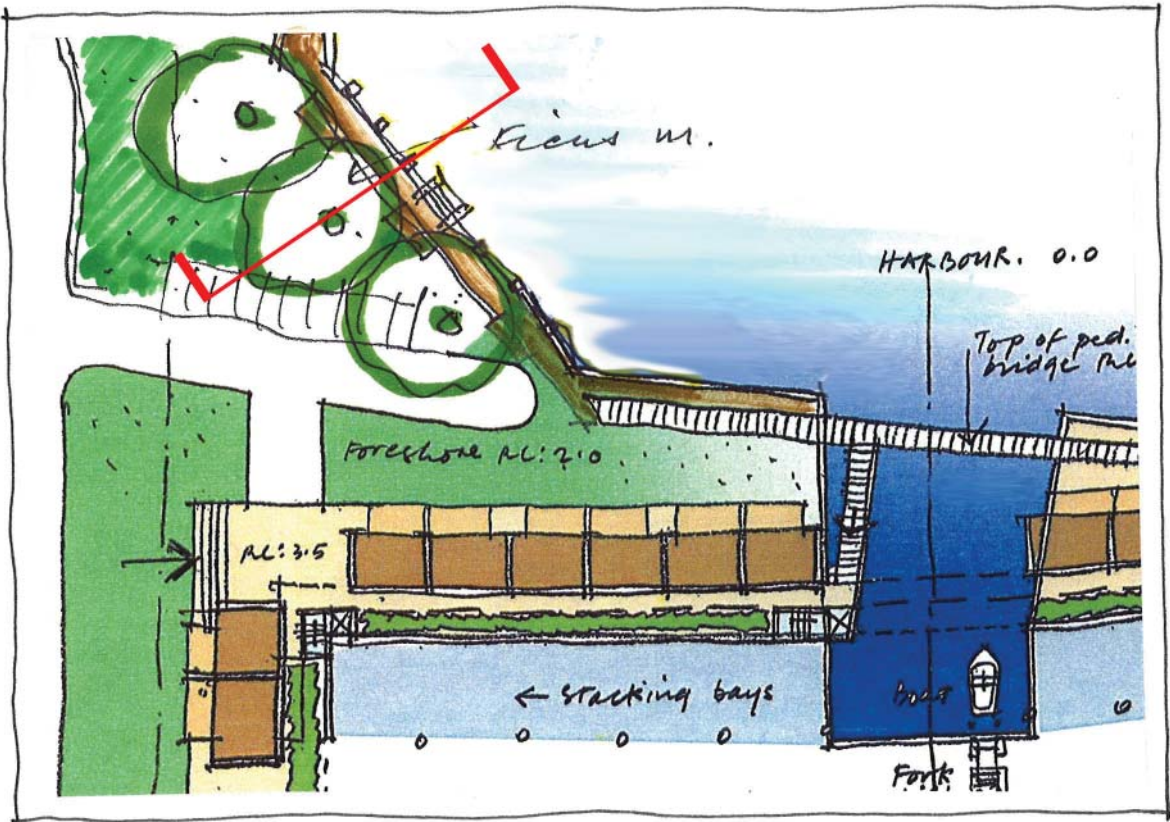


Fig. 05 - Harbour Edge South

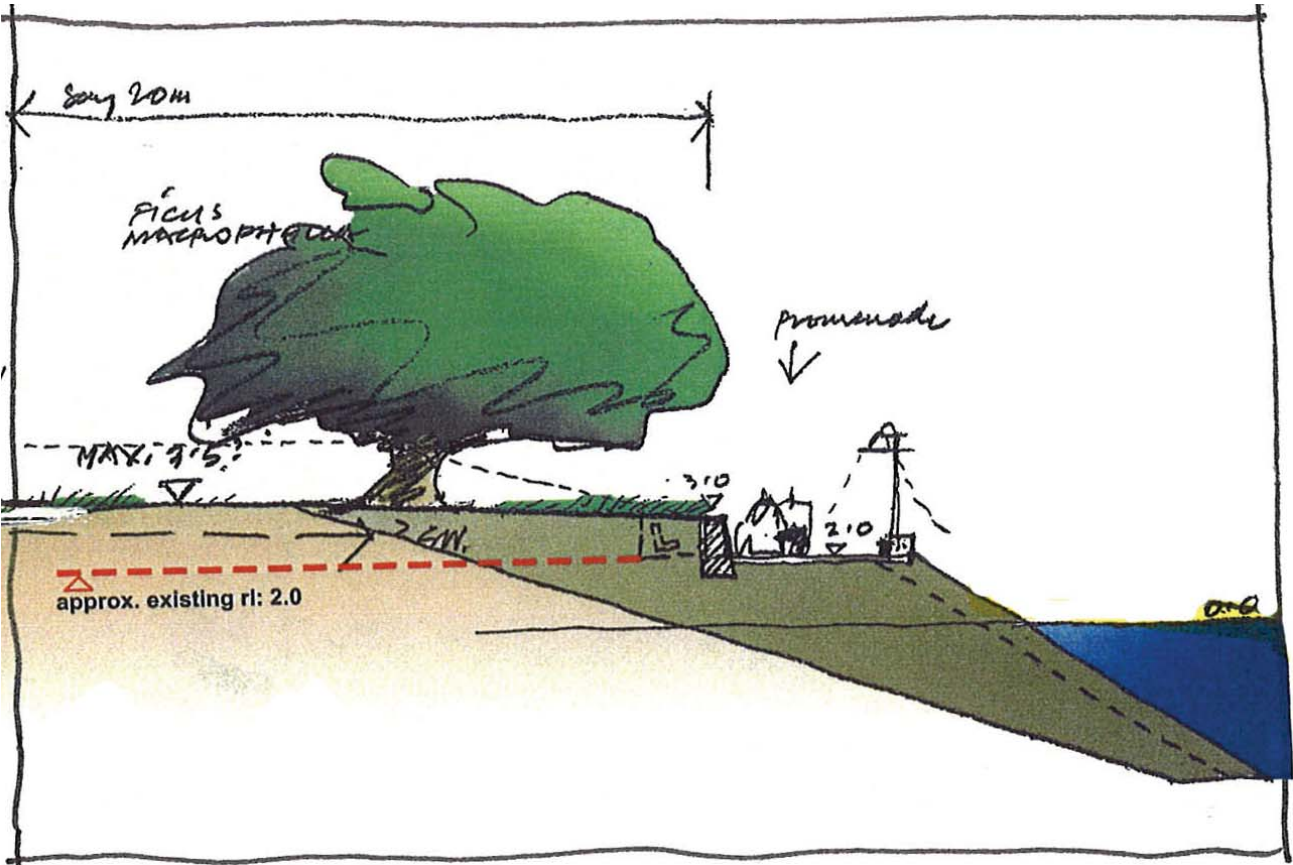
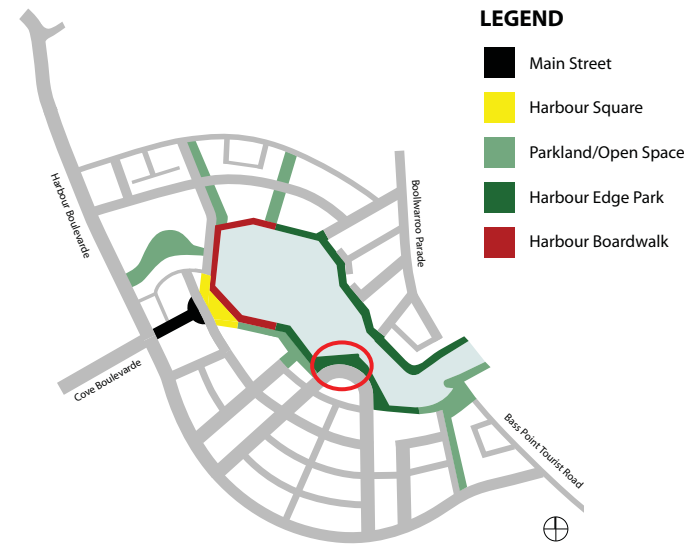


Fig. 06 - Harbour Edge South Section



The Promontory

Principles

Urban park on harbour edge providing a range of 'compressed' spaces catering for small and larger passive group activity. Accent on safety (enclosed edge) and shelter (tree canopy) in a potentially active location.

Size

Approximately 150m long x 18m wide including adjacent road verge.

Features

- Stone sea wall and opposing planter/niche walls on street side. Niche enclosure of varying sizes with outlook to harbour.
- Strong canopy trees, spacing to be reviewed to suit niche proportions etc.

Note:

Sea wall edge will accommodate main pedestrian movement.

- Hard pavement to pedestrian/bike path only with decorative gravel elsewhere.
- Furniture includes bench seating (with back), standard lamps at edge, low level niche lighting (must be well lit at night), garbage bins, art works, interpretive/educational signage.

Plant Palette

- Strong canopy trees required with 'front line' coastal edge suitability. Clean trunk (views under) and not too large (apartment views over) eg. *Cupaniopsis*.
- Raised beds to accommodate groundcover planting – to be selectively replaced with shade tolerant species as canopy develops. Accent on colour and low maintenance/ water requirements eg. *Carpobrotus* species.

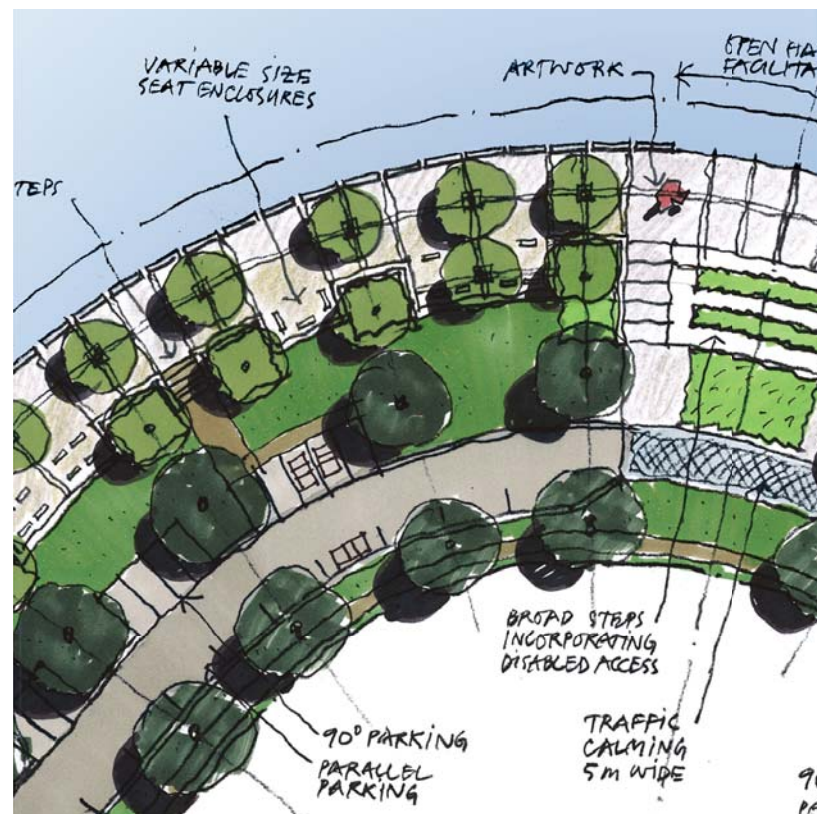


Fig. 07 - The Promontory

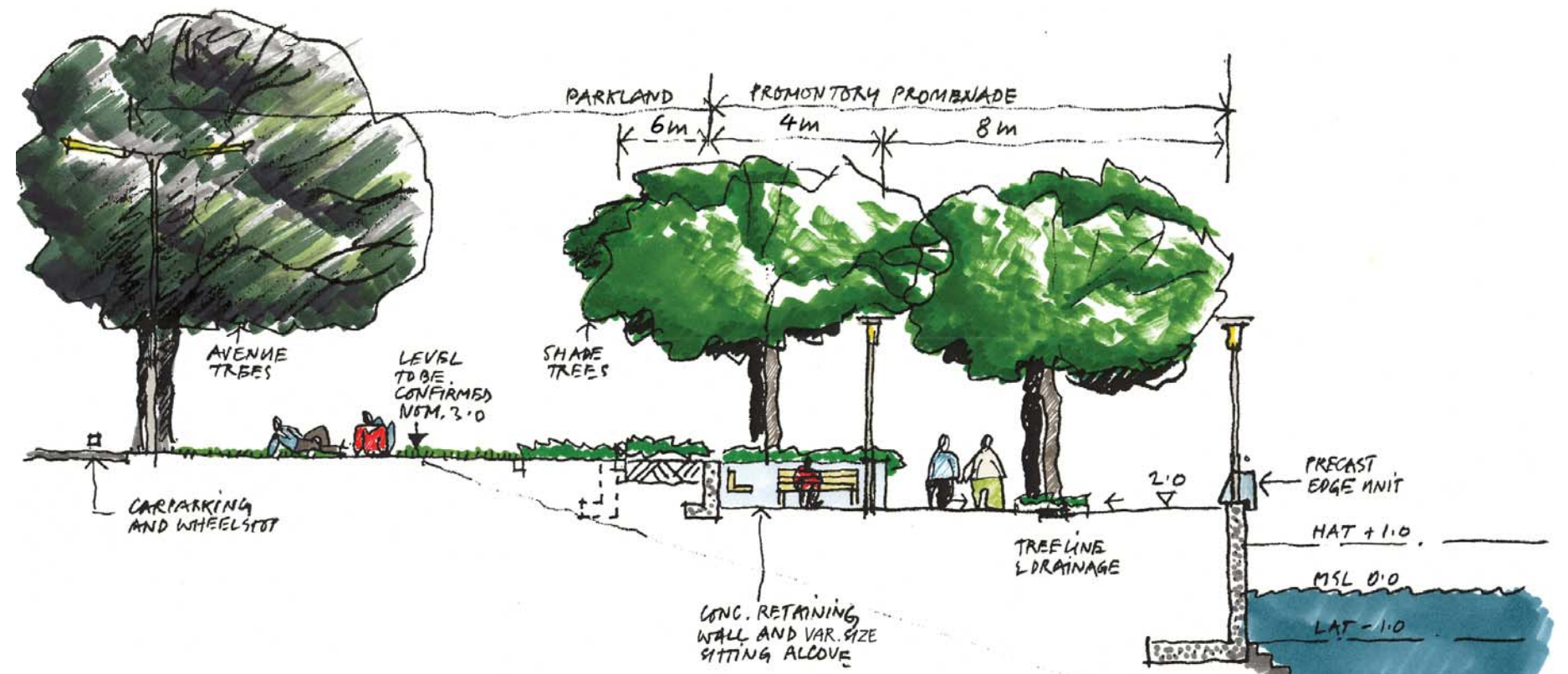
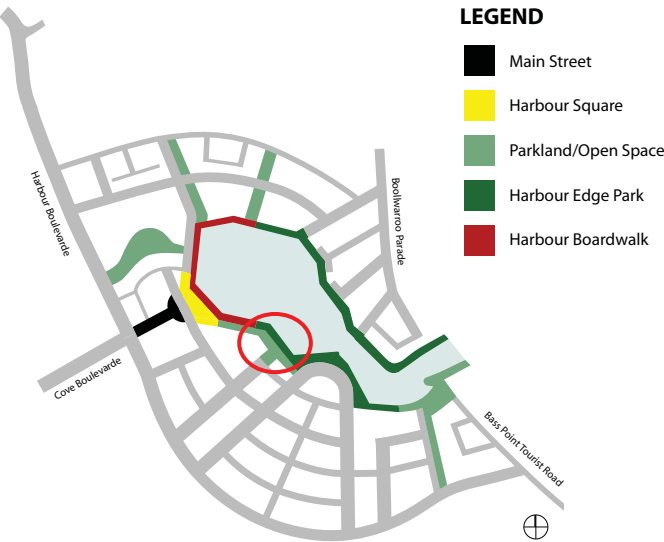


Fig. 08 - The Promontory Section

Harbourside West Park



Principles

Complements Promontory by providing broader grassed areas suitable for 'kickabout', sunbaking etc. Also acts as lightly terraced forecourt to quality apartments on southern perimeter. Views from the same across park are important as are those from converging street/view corridors.

May also contain decorative water elements to complement sunny (north-east facing) atmosphere.

Size

Approximately 150m long x 20-40m wide.

Features

- Broad, grassy spaces suitable for passive recreation and limited sports activity (eg. frisbee rather than football).
- Hard paved promenade pathway with gravel side infill areas.
- Formal presentation, eg. Path/tree/terrace setout.
- Low stone terrace walls (sitting height) to complement promontory and local colours.
- Bench seating and lighting limited to edge of promenade – other lighting from apartments.
- Possible small water features associated with access path/address to apartments on southern perimeter.

Plant Palette

- Front line coastal edge trees (*Cupaniopsis* as per Promontory) with clean trunk (views under) and not too large (views over). Consider alternative placement of fewer *Ficus Macrocarpa* (views between).
- Lawn grasses (*kikuyu* or *buffalo*).

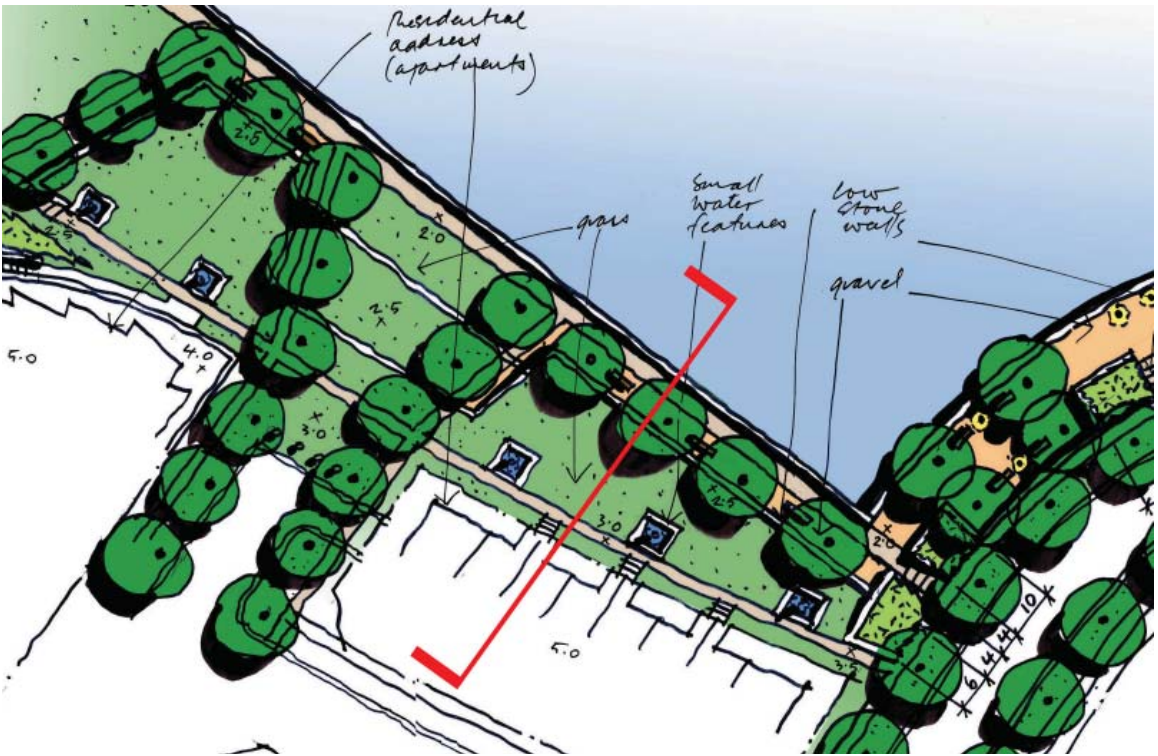


Fig. 09 - Harbourside West Park

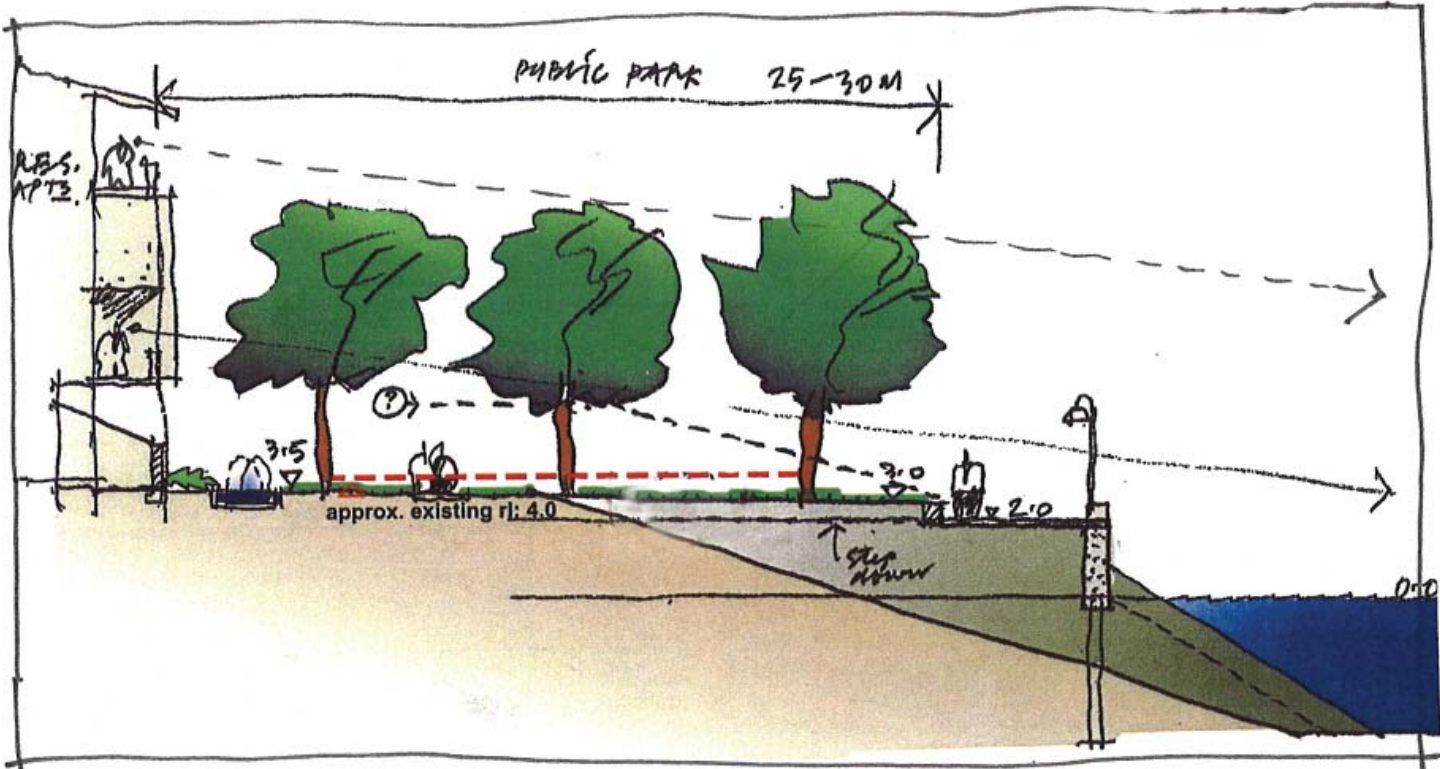
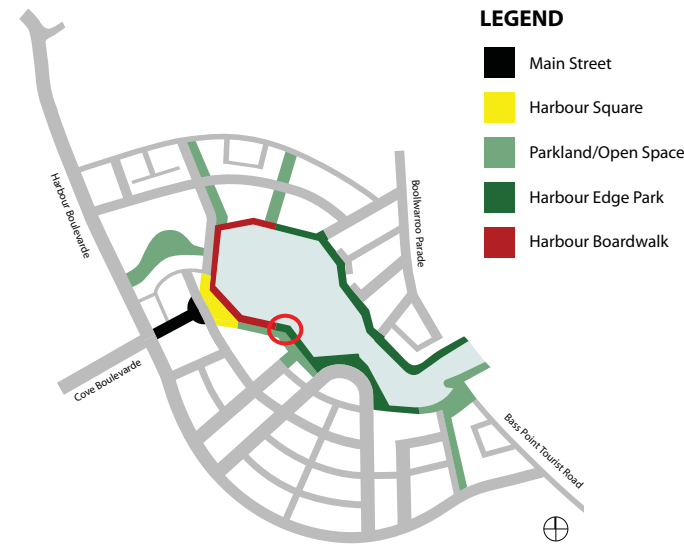


Fig. 10 - Harbourside West Pak Section



South Boardwalk

Principles

Boardwalk and promenade space facing main access to commercial marina. Includes upper level promenade connection from main street through to mezzanine level of harbour administration/commercial boat supplies building. Lower level of same has direct vehicle/parking access equivalent to working port end of harbour.

Size

Maximum 100m long x 8-10m wide.

Features

- 5.0m wide boardwalk of heavy duty timber construction. Detailed for simple/robust maritime feel. Regular spacing of piles exposed above boardwalk level, galvanised metal ring/white paint cap.
- Upper level promenade of steel construction with heavy duty timber deck, steel shade canopy. Stair access to main promenade level.
- Furniture includes standard lamps on boardwalk edge, garbage bins, occasional bench seating, signage (information and safety).

Plant Palette

Not applicable.

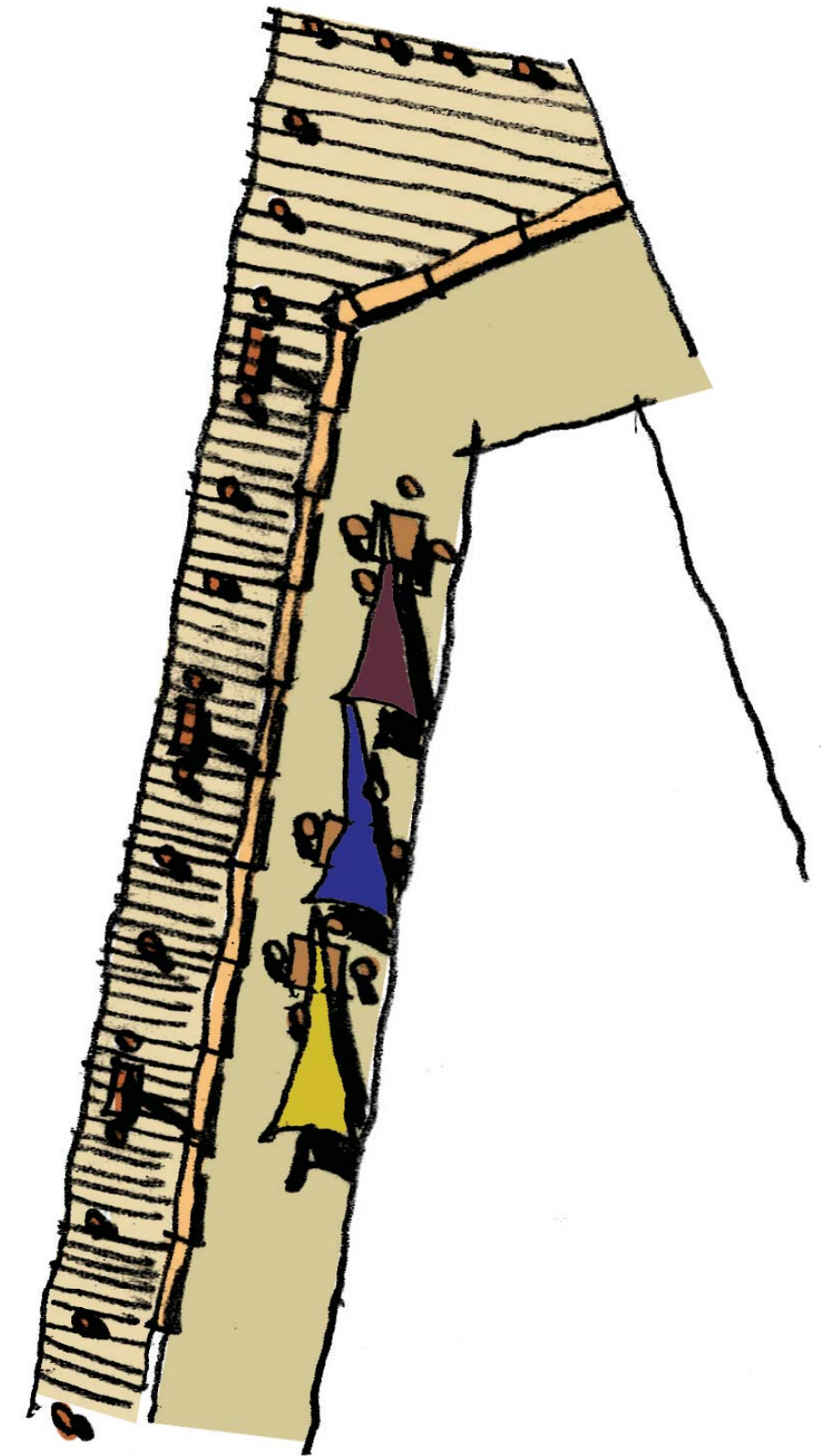
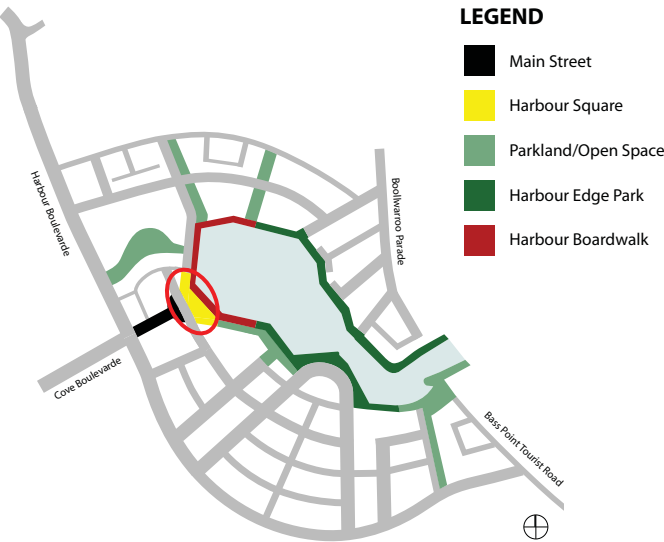


Fig. 11 - South Boardwalk

Harbour Square



Principles

Harbour Square will be the main focus of outdoor cultural activity. The key design issues for the square are:

- The need for the park area to accommodate multi-functional requirements concerned with day to day use, eg. school groups, passive recreation etc.
- Staging of low key events.

Size

Approximately 6,000m² (not including boardwalk or crescent).

Features

- Design
 - Maintaining the visual quality and scale of the square.
 - Visual connection of the commercial centre to the harbour edge i.e. maintaining easy sightlines between the crescent piazza and water/boats etc.
 - Providing an understated but fitting termination of the land/water axis in terms of scale, broadening of the vista and focus on the harbour.
 - Avoiding desire paths which interrupt the square's main passive use – keeping most activity to the perimeter.
 - Use of predominantly soft materials but at same time recognising the square's civic role.
 - Providing a strong landscape and streetscape structure but at the same time avoiding unnecessary clutter ('less is more' principle).
 - Use and integrity of materials (hard and soft) appropriate to the Shellharbour area.
 - Implementation of sustainability principles (materials, water use, plant selections etc.).



Fig. 12 - Harbour Square

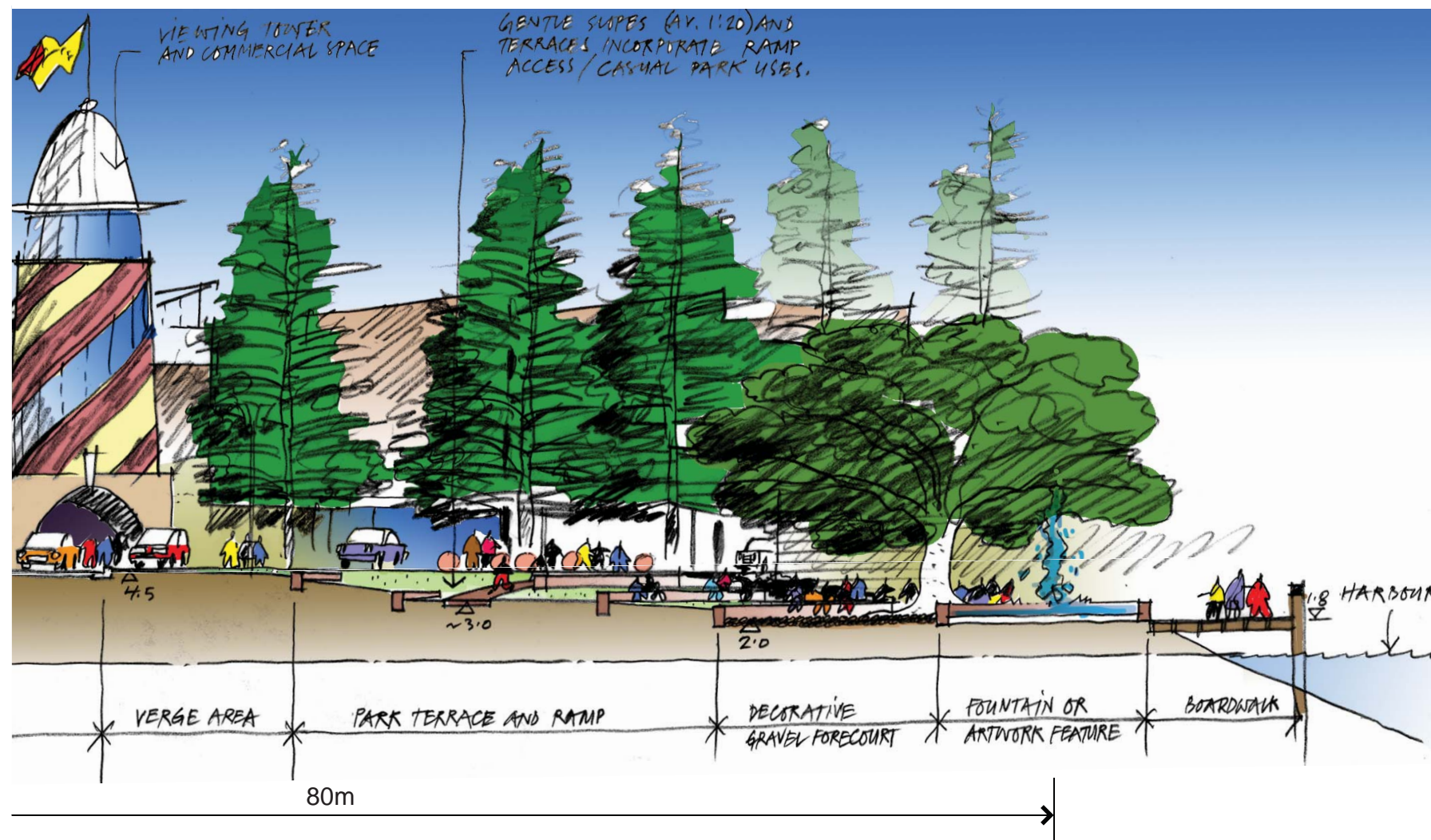


Fig. 13 - Harbour Square Section

- Materials/Function
 - Continuity of 5.0m wide boardwalk of heavy duty timber construction. Detailed for simple/robust maritime feel. Regular spacing of piles exposed above boardwalk level, galvanised metal ring/white paint cap.
 - Water feature or other suitable art work on central axis water edge.
 - Suitable stage area for amphitheatre use, grass or gravel etc. depending on frequency of use.
 - Grassed, lightly terraced banks between street and stage area with terrace walls at suitable sitting height.
 - Crisp/clean materials, not rustic, eg. precast/honed concrete, corten steel, stainless steel.
 - Simple planes and details, not fussy or complex.

Plant Palette

- Large, heavy canopy trees framing central view corridor (*Ficus macrocarpa*).

Note:

These trees will mature over several decades and adjustments to maintenance practice will be required over a considerable period.

- Groundcover beds required in limited number of locations – should contain simple (monocultural) choice.
- Hardwearing lawn grass eg. *buffalo* – neat edge trim details eg. not crude road kerb.

Main Street/Road B Junction

Principles

Essentially an extension of Main Street, providing a transition to Harbour Square. Provides an expansion to Harbour Square during major outdoor functions when Main Street is closed.

Size

Approximately 60m long x 30m wide including Main Street.

Features

- Predominantly hard paved surfaces suitable for placement of moveable furniture, flexibility of use and movement of pedestrians. Should be 'decorative' but not fussy and should merge with Main Street treatments.
- Important to accommodate a degree of variety in the treatment of pavements, especially as conditions change over time eg. it may be desirable initially to incorporate soft treatments which can be replaced with more urban alternatives as usage intensifies, over a 5-10 year period.
- Provides a platform for overlooking the harbour (4m-5m higher than it).
- Small numbers of shade trees so that views are kept open (umbrellas and canopies can also be used).
- Sculptural elements.
- Typical furniture elements include:
 - Outdoor café enclosure
 - Tables and chairs
 - Street umbrellas
 - Smoker stands
 - Light poles
 - Tree guards
 - Bollards

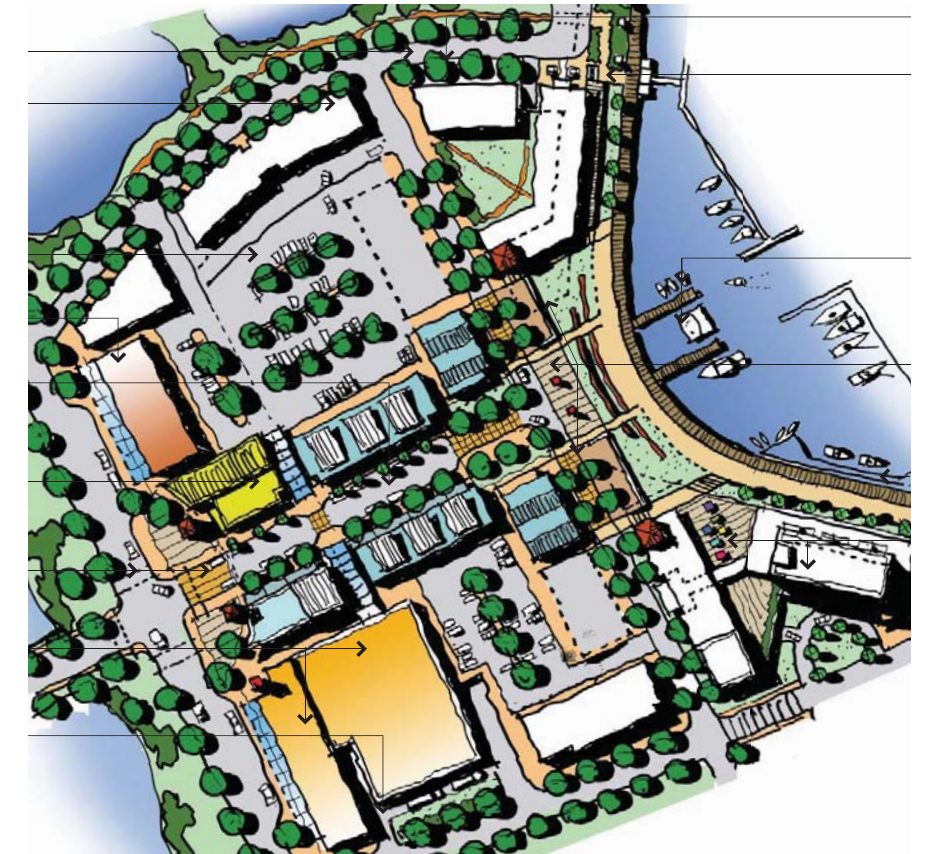


Fig. 15 - Main Street/Road B Junction Aerial Perspective

Plant Palette

- For Main Street (see Street Guidelines, type Special).
- Small shade trees – eg. *Syzigium*, *Melaleuca*.
- Palms (*livistona*) and selected groundcover planting in pavement level beds.
- Where required fine hardwearing lawn grass or suitable low maintenance alternative.

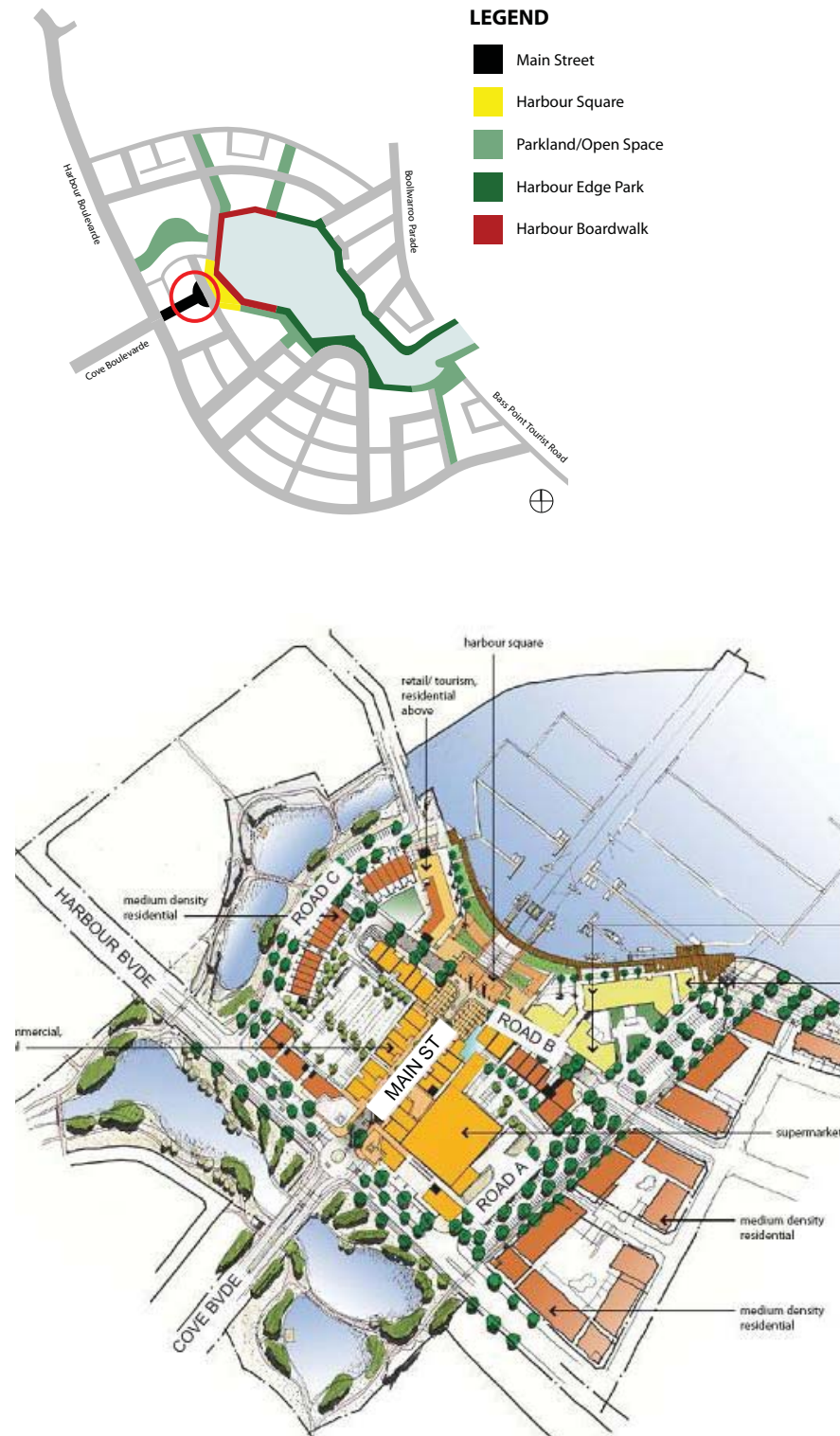


Fig. 14 - Main Street/Road B Junction

West Boardwalk

Principles

Boardwalk parallel to street on western side of harbour.
Boardwalk also functions as pedestrian bridge over canal at land-bridge/culvert connection to wetland.

Size

Approximately 100m long x 10-15m wide.

Features

- 5.0m wide boardwalk of heavy duty timber construction. Detailed for simple/robust maritime feel. Regular spacing of piles exposed above boardwalk level, galvanised metal ring/white paint cap.
- Includes boardwalk widening for pergola covered area alongside concession space.

- Includes boardwalk extension at pedestrian bridge with same detailing and width.
- Terraced plant beds at road bridge abutments (local stone and rip-rap) and at side street view slot.
- Furniture includes standard lamps on boardwalk edge, garbage bins, occasional bench seating, signage (information and safety) plus removable café furniture.

Note:
No safety rail is proposed at boardwalk edge.

Plant Palette

- Low maintenance groundcovers in terraces suitable for scrambling on riprap eg. pigface.

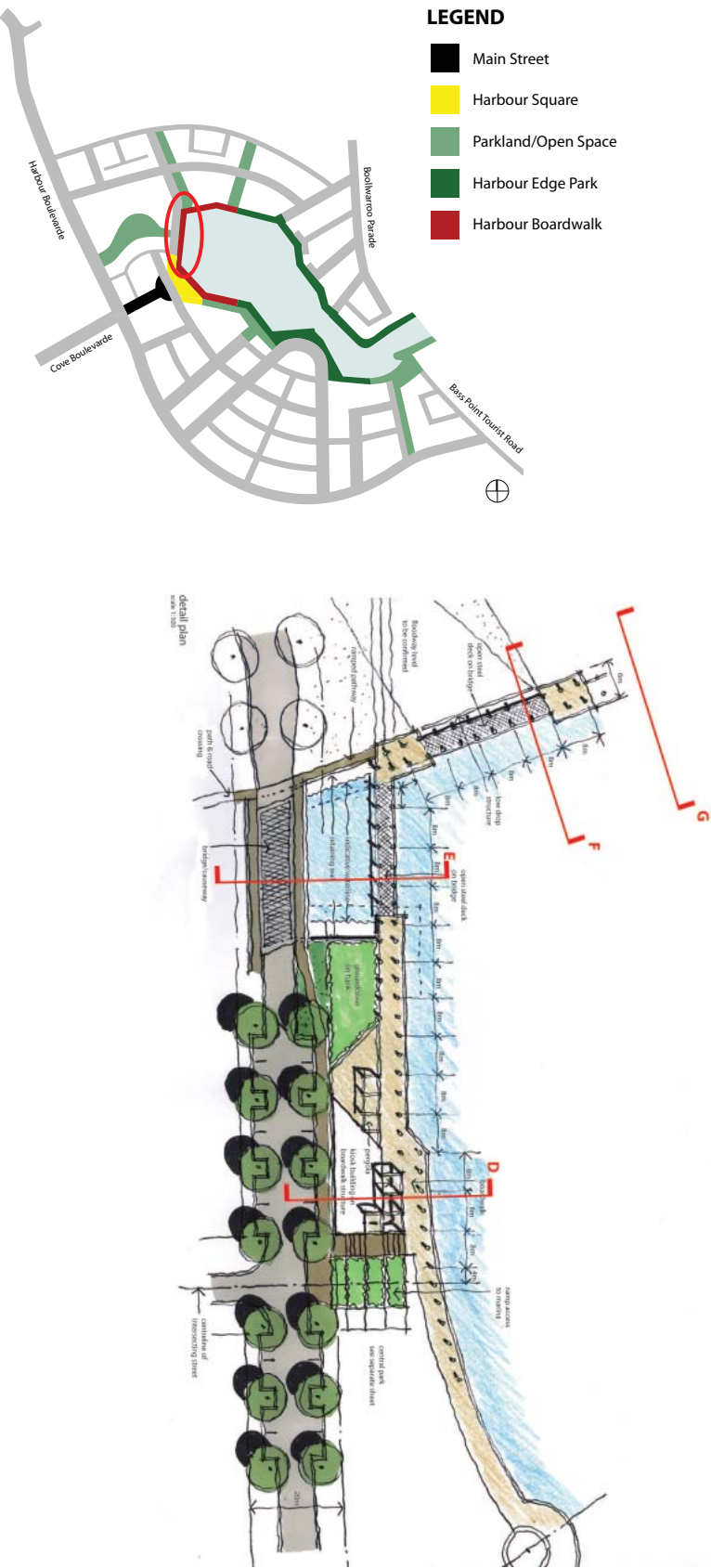


Fig. 16 - West Boardwalk

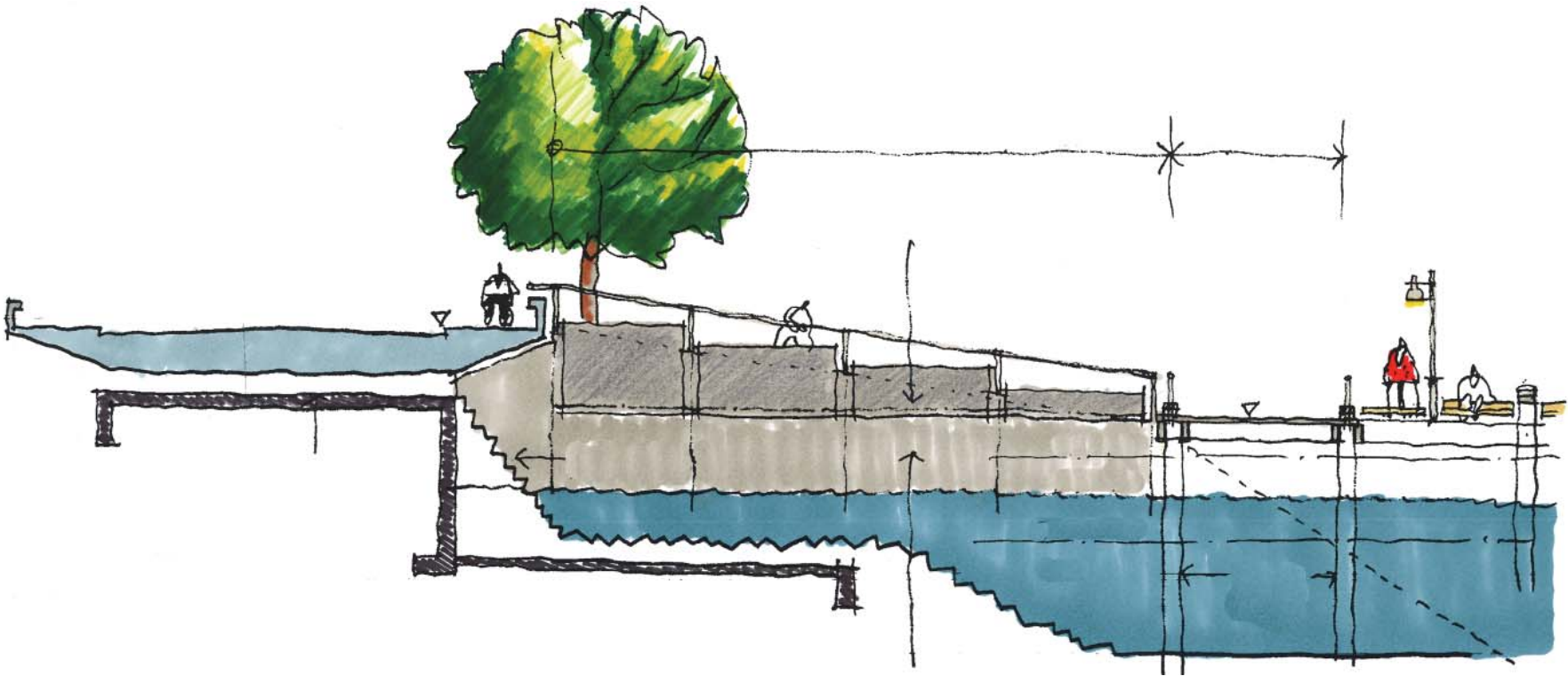
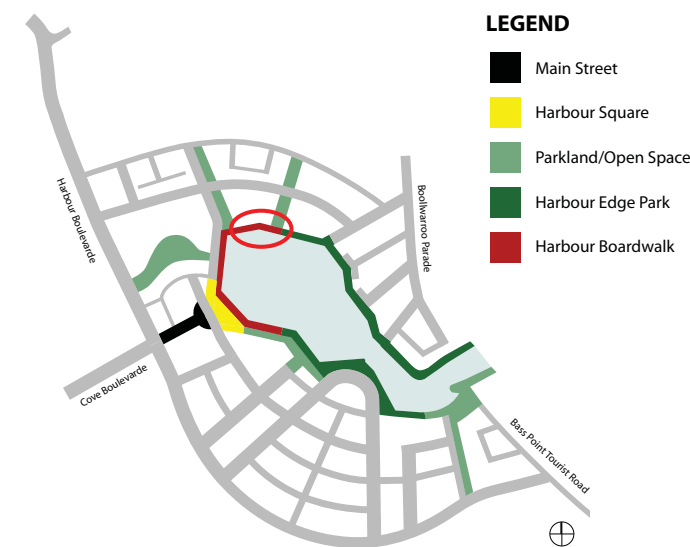


Fig. 17 - West Boardwalk Section

North Boardwalk



Principles

The North Boardwalk is in close proximity to residential sector – controlled visual separation.

Size

Approximately 150m long x 5m wide.

Features

- 5.0m wide boardwalk of heavy duty timber construction. Detailed for simple/robust maritime feel. Regular spacing of piles exposed above boardwalk level, galvanised metal ring/white paint cap.
- Includes floodway crossings (similar to pedestrian bridge) with same detailing and width as boardwalk.
- Furniture includes standard lamps on boardwalk edge and safety and info signage.

Plant Palette

Not applicable.



Fig. 18 - North Boardwalk

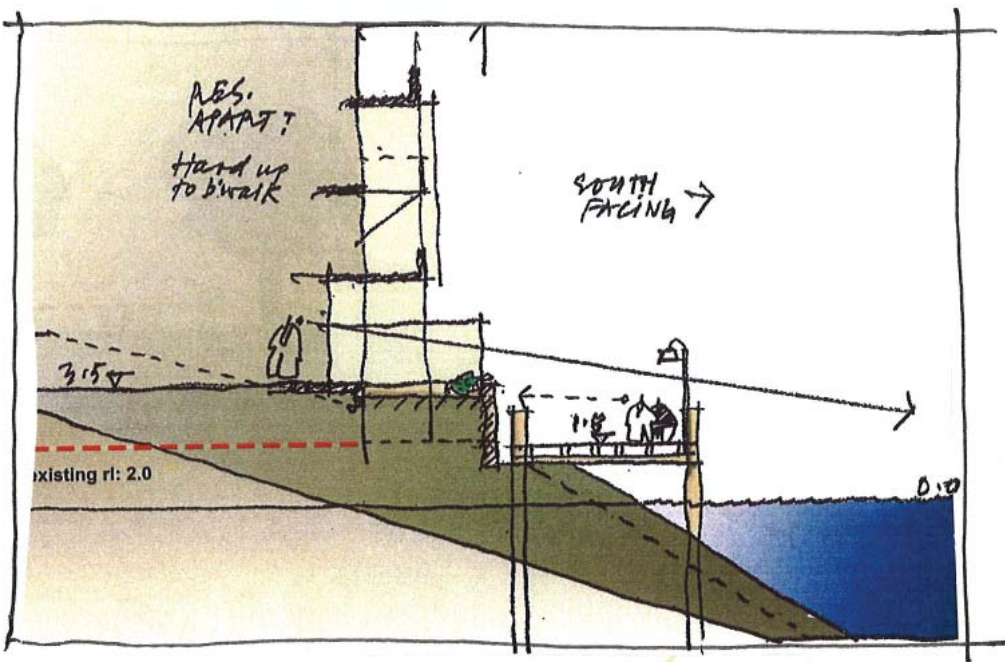


Fig. 19 - North Boardwalk Section

Harbourside North Park

Principles

Complements promontory space by providing broader grassed areas suitable for 'kickabout', sunbaking etc. Also acts as lightly terraced forecourt to quality apartments on eastern perimeter. Views from the same across park are important as are those from converging street/view corridors.

May also contain decorative minor water elements.

Breakout sections at end of streets provide diversity and passive recreation opportunities as well as ability to more directly experience the water from the street.

Features

- Broad, grassy spaces suitable for passive recreation and limited sports activity (eg. frisbee rather than football).
- Hard paved promenade pathway with gravel side infill areas.
- Formal presentation, eg. path/tree/terrace setout.

- Low stone terrace walls (sitting height) to compliment local colours.
- Bench seating and lighting limited to edge of promenade – other lighting from apartments.
- Possible small water features.
- 'Breakout' spaces between street cul-de-sac and harbour with two intermediate levels – one at RL 2.0 grassed and lowest at RL 1.0 containing rocks with gravels.

Note:

Likely to be temporarily inundated with sea water at extreme tides.

Plant Palette

- Front line coastal edge trees (*Cupaniopsis* as per Promontory) with clean trunk (views under) and not too large (views over).
- Lawn grasses (*kikuyu* or *buffalo*).

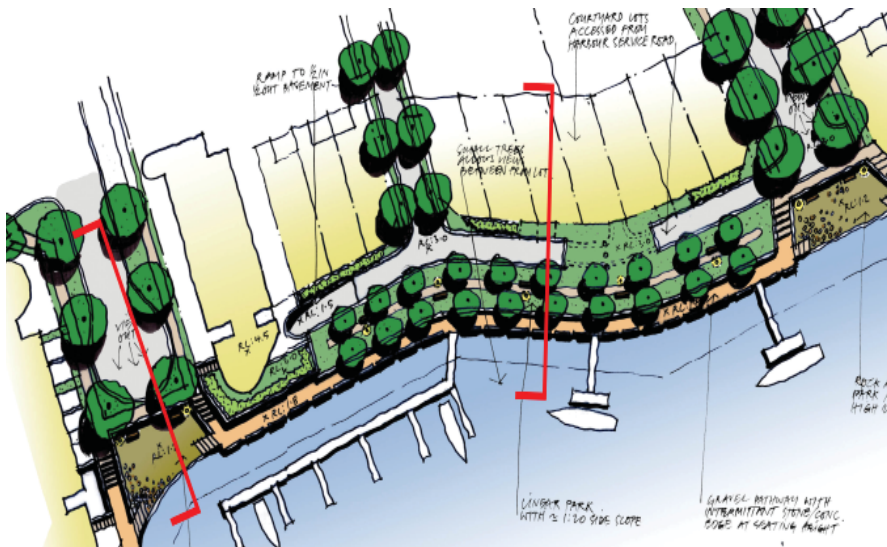
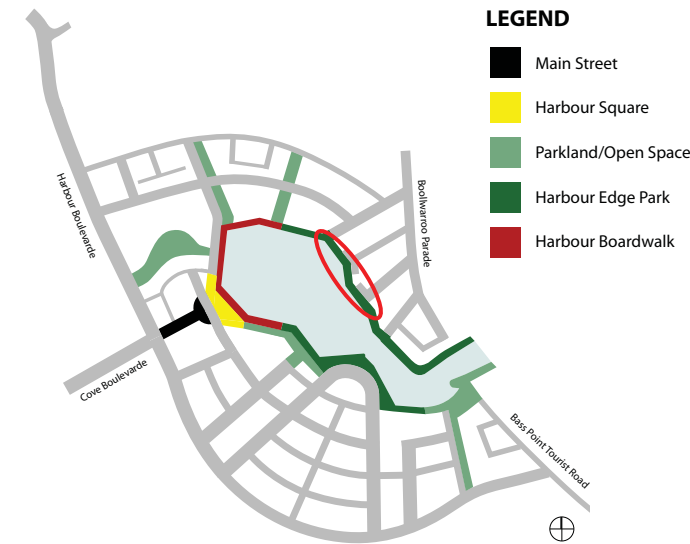


Fig. 20 - Harbourside North Park

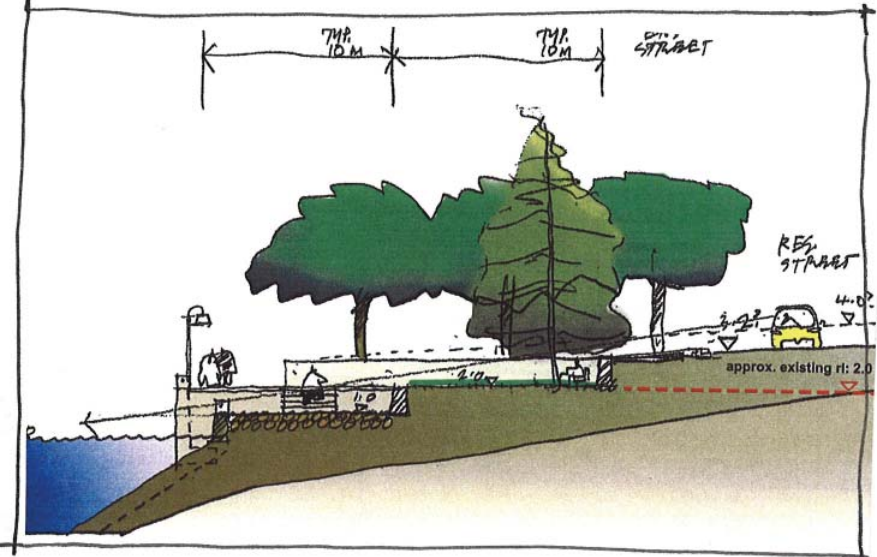
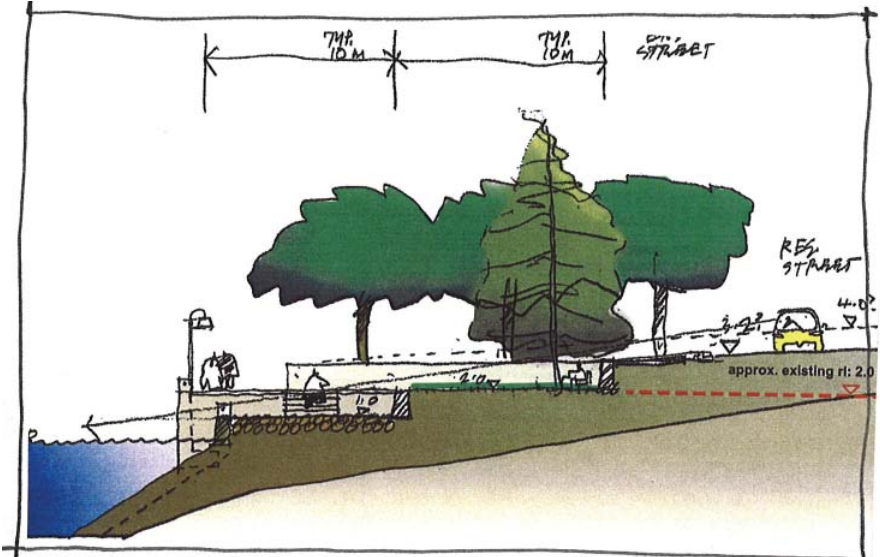
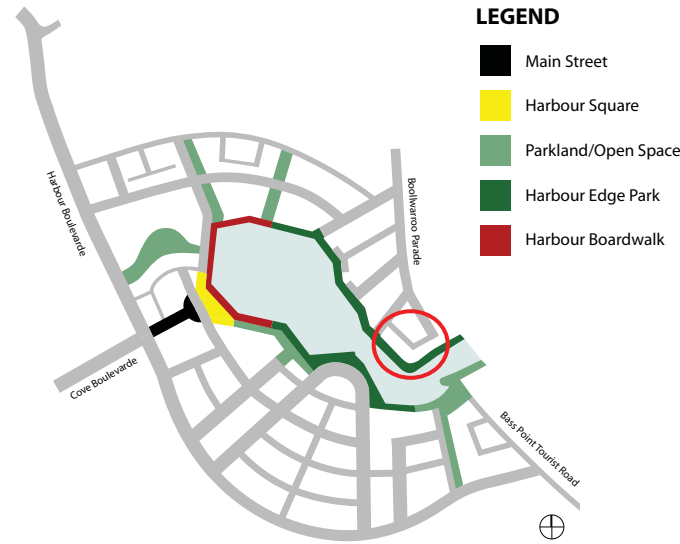


Fig. 21 - Harbourside North Park Sections



Harbourmouth Promenade



Principles

Promenade with 'soft strip' edge to provide reasonable separation from exclusive residential external living space.

Size

Maximum 200m long x 10-15m wide.

Features

- Rip-rap edge to harbour.
- Gravel paved promenade with stone bollard separation at harbour edge.
- Furniture includes occasional bench seating in soft-edge nooks and standard lighting at harbour edge.
- Level separation (say 1m) at residential boundary with local stone retaining walls.
- Informally planted soft edge to promenade allows views of harbour from residential.

Plant Palette

- Small front line coastal edge trees eg. *Melaleuca*, *Banksia*.
- Groundcovers and native grasses suitable for informal ground plane.



Fig. 22 - Harbourmouth Promenade

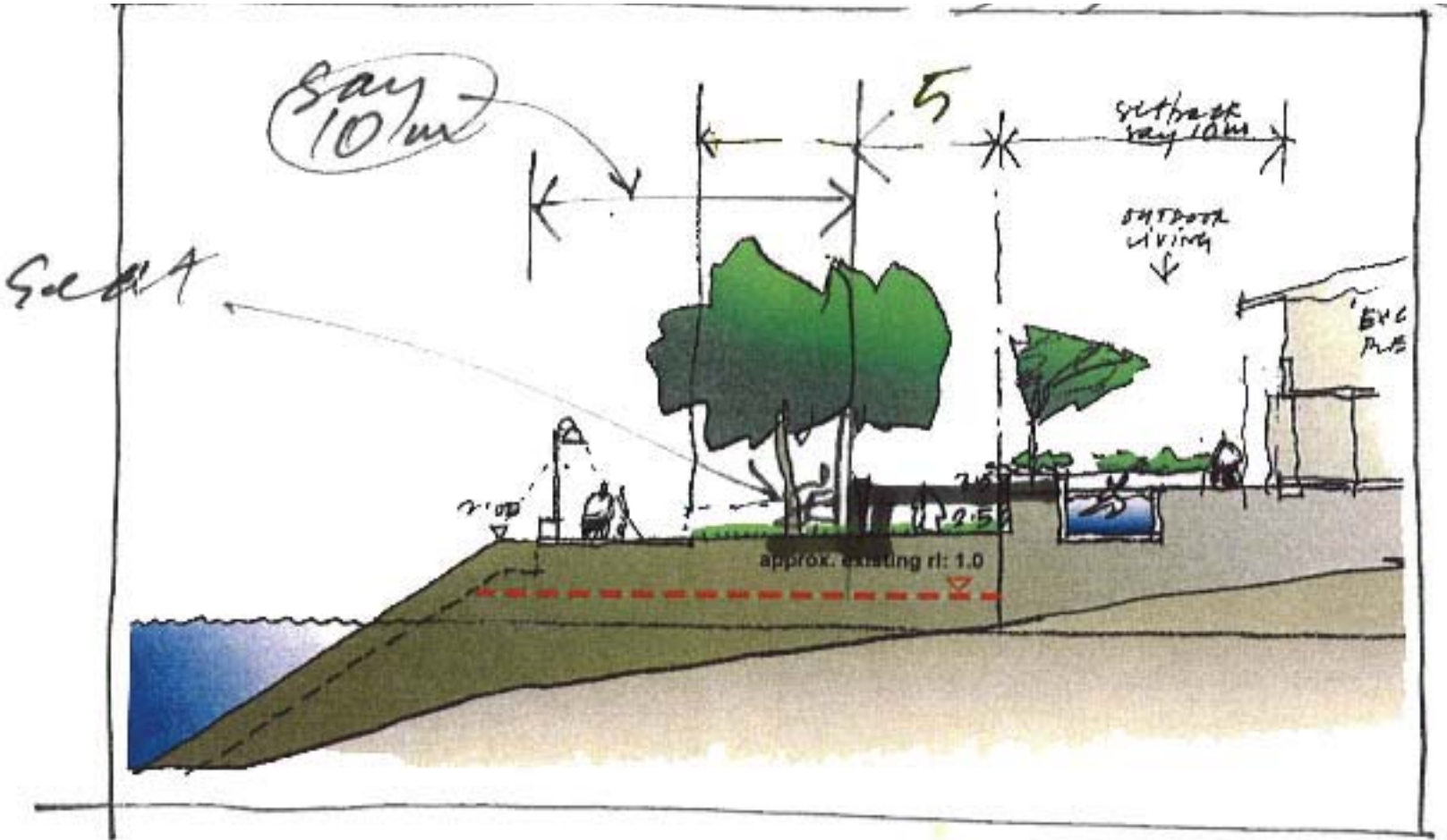
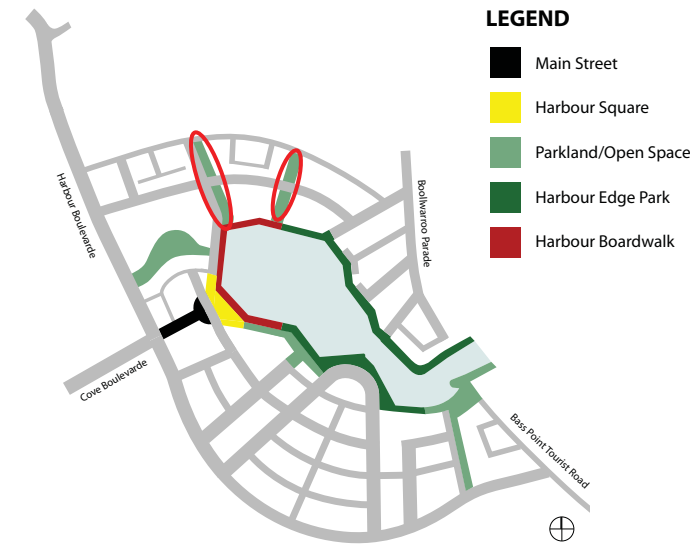


Fig. 23 - Harbourmouth Promenade Section



Floodway

Principles

Low velocity stormwater floodway for discharge of excess floodwater in low frequency events. Also important view corridors from Shellharbour Village direction and open kickabout/passive recreation spaces. Where residential lots about these also provide a high quality address function.

Size

West – over 200m long x 20-30m wide
East – 180m long x 40m wide

Features

- Broad shallow swales with bollard separation at roadways. Abrupt level differences where required with neatly detailed concrete kerb or wall, possibly incorporating local stone.

- Majority of area is grass with lower areas subject to occasional sea water inundation to contain salt tolerant species and/or rocks and gravels.
- Pedestrian paths double as open space connections and as formal residential access.
- Formal avenue tree planting.

Note:

Presentation is not as semi-natural bio-swale, hence formal approach.

- Furniture includes park lighting (with additional individual lighting at residential address points) as well as occasional bench seating.

Plant Palette

- Avenue planting with medium to large species eg. *Alphitonia excelsa*, *Euc. amplifolia*.
- Groundcover planting in dedicated beds, low maintenance species, accent on colour, shade tolerance.
- Drought tolerant grass eg. *buffalo*, *kikuyu*.
- Salt tolerant grasses/groundcovers/sedges in low areas eg. saltwater couch, pigface.

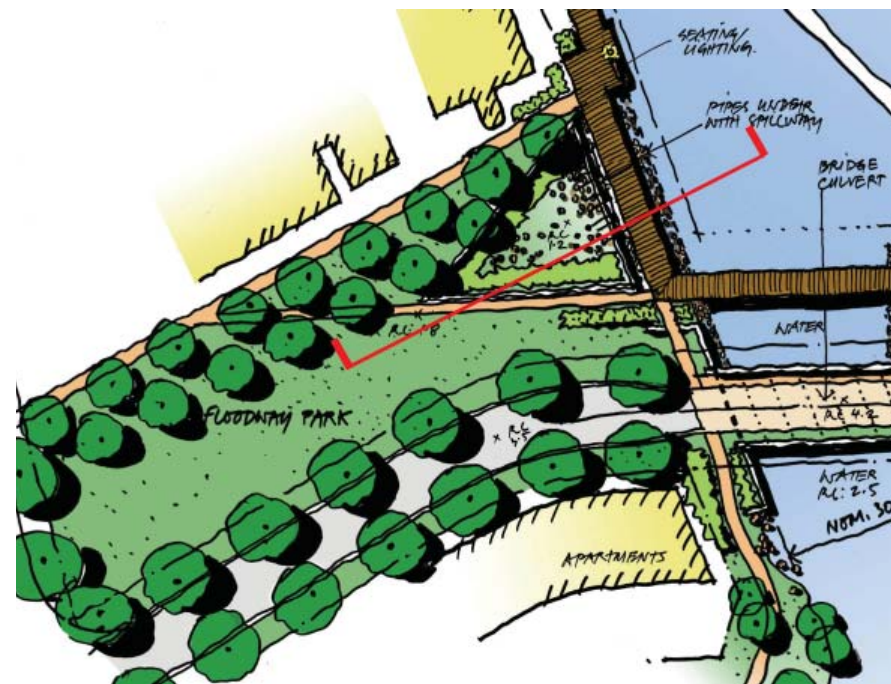


Fig. 24 - Floodway

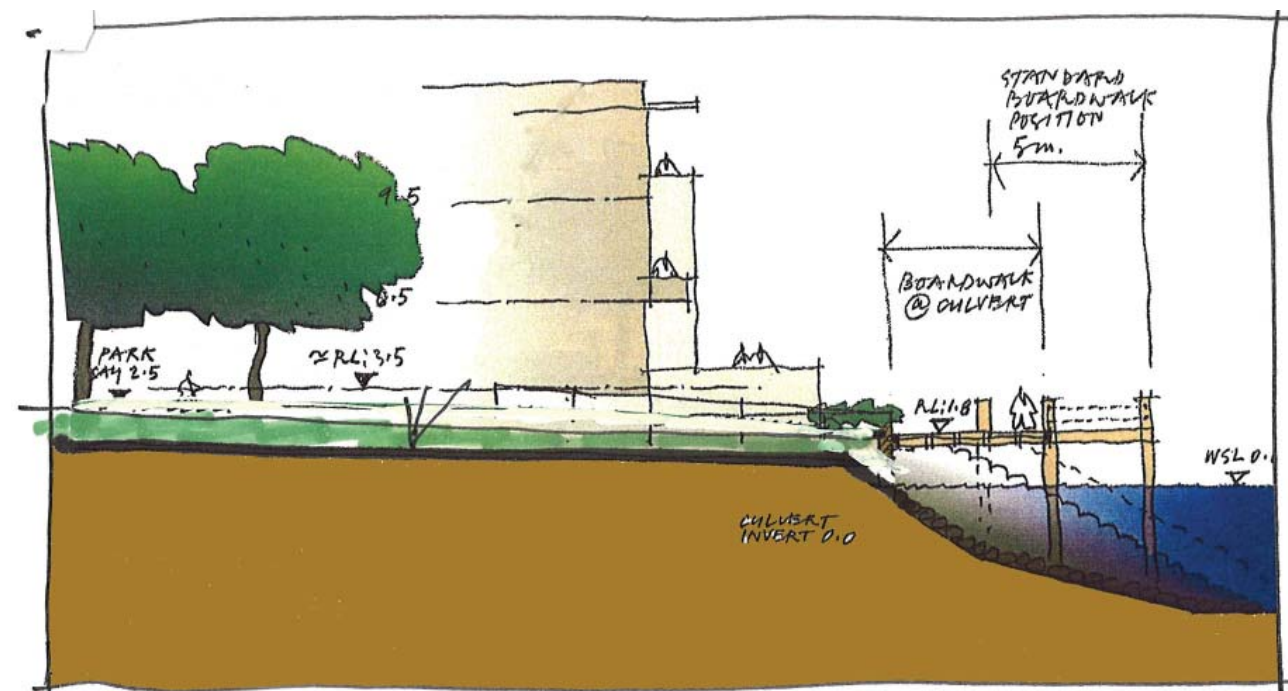


Fig. 25 - Floodway Section

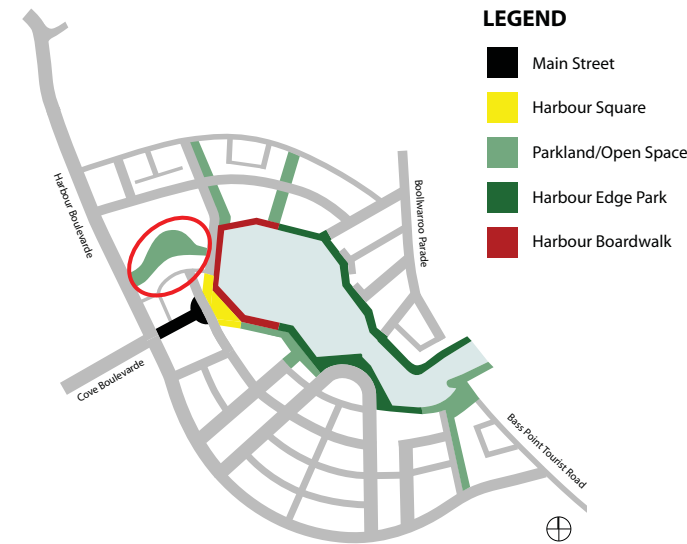


Fig. 26 - Wetland

Wetland

Principles

Open space associated with permanent water wetland generally publicly accessible via pathway system. Informal plantings consistent with natural wetland species in Shell Cove area and bio-management of wetland.

Size

Generally 10-15m wide.

Features

- Open space water edge corridor for compatible active and passive recreational usage.
- Informal semi-open plantings with occasional manicured grass areas for seating, picnics etc. lightly mounded land formation.
- Continuous or connecting pathway system for pedestrian/ bike and associated uses eg. jogging, fitness trails etc. Ideal gradient max 1:20.

- Furniture likely to include bench seating, interpretive/ educational signage, lighting of special features only (eg. jetty), fitness items (eg. horizontal bars), sections of boardwalk or bridges where appropriate, bollards, safety rails, garbage bins only where specifically needed (eg. at picnic site)
- Water elements may incorporate weirs and/or bridges, jetty or wharf.

Note:

Swimming and other water contact activity not generally encouraged.

Plant Palette

- Structure trees generally limited to clumps of small trees eg. *Melaleuca styphellioides* *M. decora*, *Callistemon saliguns*, *Banksia integrifolia*, with occasional larger (shade) trees eg. *Cupaniopsis*, *Angophora*.
- Ground plane generally consisting of native grasses and groundcover shrubs (no medium to large shrubs for safety reasons) drawn from locally endemic species.
- Aquatic plants of the non-invasive type drawn from locally endemic species lists.

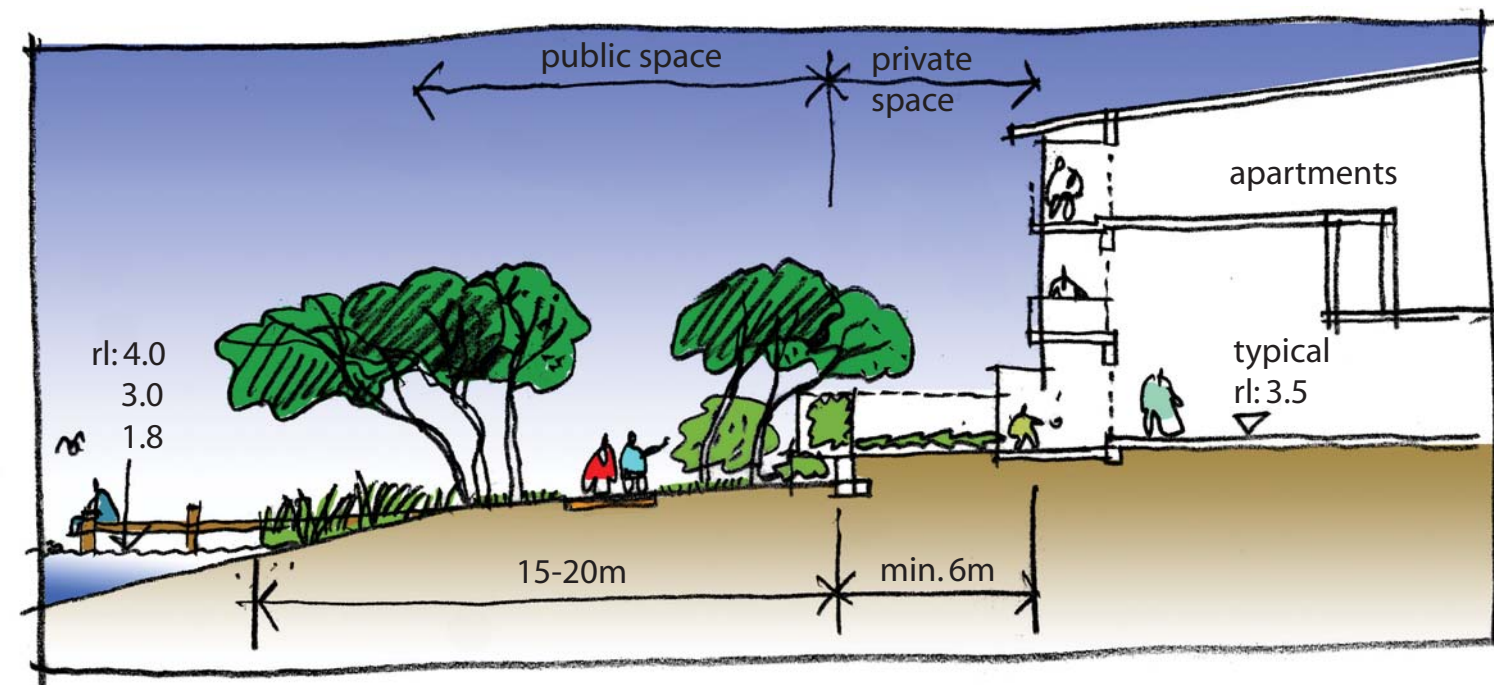


Fig. 27 - Wetland Section