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# **LAKE NARRACAN FORESHORE**

## **LANDSCAPE MASTERPLANS**

JUNE 2017

# F-01 FORESHORE

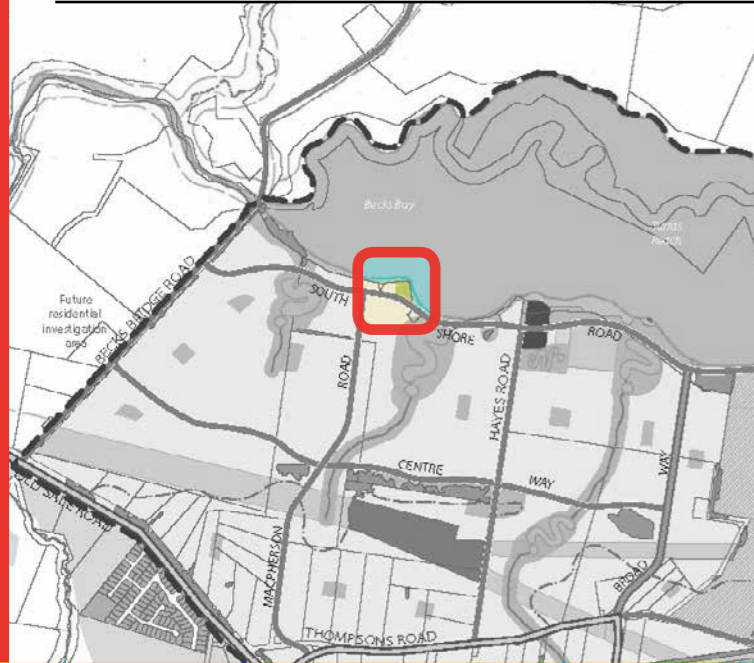


Figure 1: F-01 PSP context plan

## PSP CONTEXT/ROLE

The PSP designates the site as a 'Parkland - Special Use (Foreshore)' with an open space area of 0.84 hectares.

The future urban structure plan shows:

- > The consolidation of farm channels into a single drainage way located to the east of the site.
- > South Shores Road (Connector Road) is planned as the southern boundary to the site.
- > Residential development is shown to boarder the western boundary of the site however the exact interface is not detailed.
- > Residential development is also planned opposite South Shores Road for the length of the site.

## EXISTING SITE CHARACTER

- > Elevated, falling to the north and east.
- > Ephemeral north and east waterway edges.
- > Views over the Latrobe River delta and to Yallourn power plant cooling towers.
- > Exposed to wind particularly on top of hill. Partially protected area on North side of hill.
- > Largely void of existing vegetation.
- > Man made farm channels exist adjacent the site to the west and south east.

## DESIGN RESPONSE

- > To protect and capitalise on views.
- > To provide safe access to water and surrounding landscape.
- > To provide protected seating areas near water.
- > To create views into the park from the surrounding roads and residential areas.
- > To adjust the site boundary to maximise space on north side of the hill.
- > To create clear shared path route through the site.
- > To create shade and wind protection through tree planting and shelter.
- > To provide an iconic landmark on hill top.
- > To promote both individual and group activities.
- > To cater for passive recreational use.
- > To ensure passive surveillance from future surrounding residents is achieved.

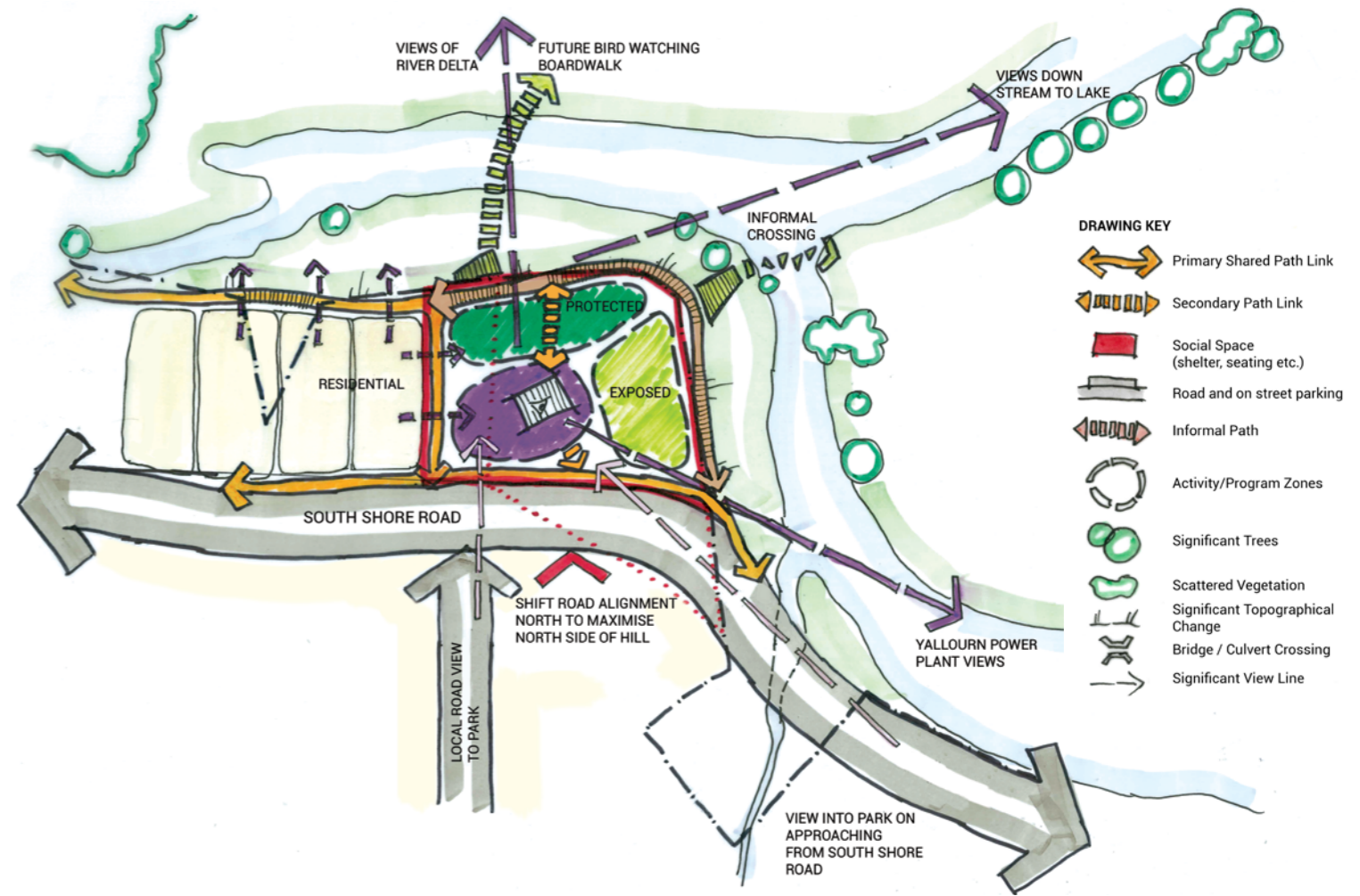


Figure 2: F-01 Design Response Plan



Figure 3: F-01 Site Photos

## LANDSCAPE VISION

A local park with an emphasis on intimate/contemplative spaces for individuals or small groups.

These spaces should be created through utilising topography, micro climates and capturing views of the scenic river delta landscape and wildlife. It is expected that people will stay for a short to medium time, to use the park as a destination for walks or short family outings.



### Key Uses/Infrastructure:

- > Shelter
- > Boardwalk on north side of hill
- > Waterway crossing opportunities
- > Creative seating opportunities
- > Substantial tree planting
- > Shared path connections
- > Picnic tables
- > Revegetation along shore



### Optional Uses/Infrastructure:

- > Seating nooks
- > BBQ

# F-01 FORESHORE

## Landscape Elements

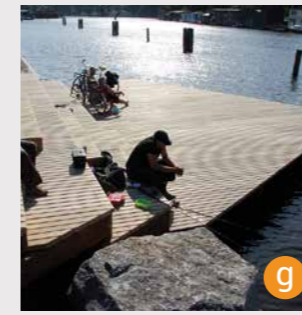
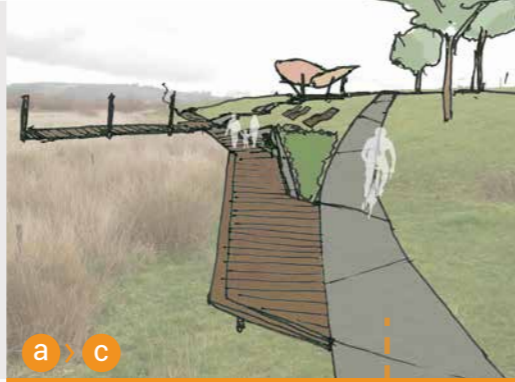


Figure 4: F-01 Boardwalk - artist impression

Figure 5: F-01 Key landscape Element Examples

- a** **Boardwalk** along existing brush and with views down stream to the lake.
- b** **Jetty** reaching into the brush. Possibility to extend into large trail into the river delta.
- c** **Dynamic boardwalk** that creates unique stopping places for small groups of people.
- d** All weather **elevated seating** with views of river delta.
- e** **Future residential development** with direct relationship to the park, providing passive surveillance.
- f** **Shared path** meandering through the site and responding to landform.
- g** **Layered platforms** providing access to the water at varying water levels.
- h** **Informal crossing to island via stepping stones** at natural shallow of tributary unlocking exploration of the surrounding environment.
- i** **Seating nooks** that provide unique intimate seating experiences.
- j** **Tree planting** on east side of hill to reduce wind and provide shade. The location of the trees should channel/emphasise view lines to the Lake and to the Yallourn power plant cooling towers in the distance.
- k** **Light weight picnic shelter** with 180° views of the river delta environment, Lake Narracan environment and Yallourn power plant.
- l** Maximise on-street parallel **car parking**.



Figure 6: F-01 Landscape Masterplan

**DRAWING KEY**

	Site Boundary		Proposed Tree
	Existing Title Boundary		Existing Tree Retained
	Indicative Future Title Boundary		Existing Vegetation Retained
	Shared Path (2.5-3m wide)		Decking/Boardwalk
	Concrete Path (1.5-2m wide)		Sandy Beach
	Roads		Significant Topography Change
	Car Parking		View Lines
	Gravel Pavement		Grass Lawn Area
	Seating		

# F-01 FORESHORE

## Opinion of Probable Cost

Site area = ~0.85 hectares

Item	Description	Indicative Quantity	Unit	Indicative Rate	Full Construction (including optional items)	Cost (\$)		
						Stage 1	Stage 2	Optional
<b>1 Preliminary</b>					<b>\$45,000.00</b>			
1.1	Site establishment of: - Waste management, - Access management, - Security (fencing), - Tree protection zones, - Site water management, - Site amenities. (This is an indicative list of likely inclusions only)	1	item	Approx. 15% of landscape works total cost	\$45,000.00	\$25,000.00	\$20,000.00	
<b>2 Demolition Works</b>					<b>\$1,000.00</b>			
2.1	Removal of existing farm fencing	1	item	1000	\$1,000.00	\$1,000.00		
<b>3 Earthworks</b>					<b>\$5,600.00</b>			
3.1	Cut and fill by machine to an average depth of 300mm	700	m <sup>2</sup>	8	\$5,600.00	\$2,800.00	\$2,800.00	
<b>4 Paving + Paths</b>					<b>\$67,840.00</b>			
4.1	Shared Path 3 metres wide	152	lin m	250	\$38,000.00	\$38,000.00		
4.2	Gravel Paths 2.5 metres wide	328	m <sup>2</sup>	30	\$9,840.00	\$9,840.00		
4.3	Stairs leading from shelter to the boardwalk.	1	item	20000	\$20,000.00	\$20,000.00		
<b>5 Planting</b>					<b>\$10,522.00</b>			
5.1	Garden bed preparation including cultivation, conditioning and imported top soil.	119	m <sup>2</sup>	30	\$3,570.00	\$1,785.00	\$1,785.00	
5.2	Garden bed shrub/ground cover planting (tube stock) 5 plants per square metre.	119	m <sup>2</sup>	8	\$952.00	\$476.00	\$476.00	
5.3	Tree planting (45L) including mulch ring and minimum 3 support stakes.	30	no.	200	\$6,000.00	\$6,000.00		
<b>6 Features</b>					<b>\$247,200.00</b>			
6.2	Boardwalk/decking along waters edge including Jetty and platforms.	674	m <sup>2</sup>	350	\$235,900.00	\$117,950.00	\$117,950.00	
6.3	Stepping stones over waterway	1	item	1500	\$1,500.00		\$1,500.00	
6.4	Triangular seating nooks cut into hill	3	item	3000	\$9,000.00			\$9,000.00
6.5	View line Pylon's	8	item	100	\$800.00			\$800.00
<b>7 Grassing</b>					<b>\$8,100.00</b>			
7.1	Partial Establish/Re-establish healthy grassed lawn area on north side of hill	900	m <sup>2</sup>	9	\$8,100.00	\$4,050.00	\$4,050.00	
<b>8 Furniture/Shelter</b>					<b>\$66,000.00</b>			
8.1	Picnic tables and benches	4	item	4000	\$16,000.00	\$16,000.00		
8.2	Lounge chairs	6	item	2000	\$12,000.00		\$12,000.00	
8.3	Abstract designed shelter to form centre piece of park.	1	item	30000	\$30,000.00	\$30,000.00		
8.4	BBQ (2 panel)	1	item	8000	\$8,000.00			\$8,000.00
8.5	BBQ connection to services (electric or gas)	1	item	15000	\$15,000.00			\$15,000.00
<b>9 Maintenance</b>					<b>\$11,700.00</b>			
9.1	Maintain for duration of establishment period, including existing trees and reinstatement areas, fertiliser, watering, top-up mulch.	26	weeks	450	\$11,700.00	\$5,850.00	\$5,850.00	
					<b>Full Construction (including optional items)</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Optional</b>
<b>LANDSCAPE WORKS TOTAL (exclusive of GST)</b>					<b>\$462,962.00</b>	<b>\$278,751.00</b>	<b>\$166,411.00</b>	<b>\$32,800.00</b>
<b>Contingency (10%)</b>					<b>\$509,258.20</b>	<b>\$306,626.10</b>	<b>\$183,052.10</b>	<b>\$36,080.00</b>

Table 1: F-01 Landscape Masterplan High Level OPC

### STAGE 1 ITEMS \$280K-\$310K

- > Shared path through the site to ensure the wider network is connected.
- > Shelter.
- > Gravel paving area under shelter and connection to shared path.
- > Picnic table sets under shelter and flat areas of the hill.
- > West section of boardwalk on north side of hill.
- > Central staircase between shelter and boardwalk.
- > All tree planting to establish trees as early as possible.
- > Revegetation along shore.
- > Removal of existing farm fence.

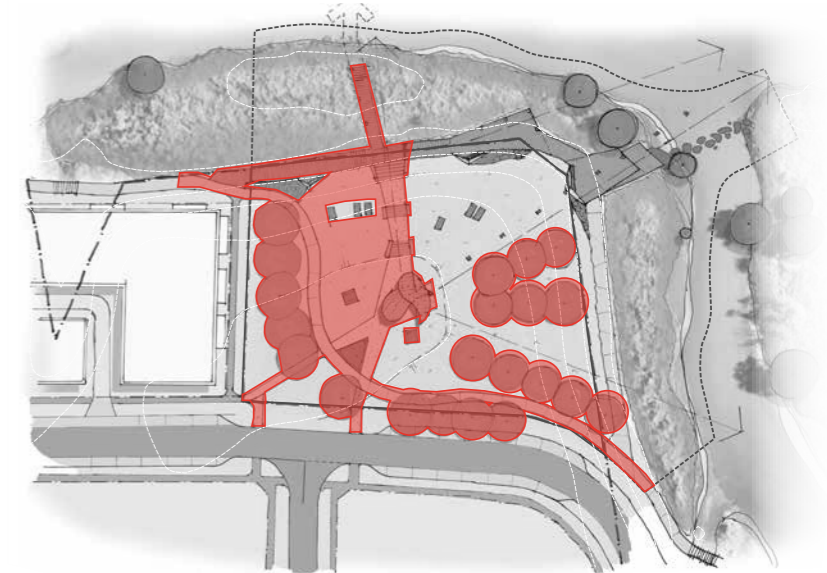


Figure 7A: F-01 Landscape Masterplan Stage 1 Plan

### STAGE 2 ITEMS \$160-K-\$185K

- > Completion of eastern section of the boardwalk including shore side platforms.
- > Additional paved pathway to connect boardwalk to the shared path.
- > Lounge chairs scattered along the north hill side.
- > Stepping stone across the waterway to the adjacent island.



Figure 7B: F-01 Landscape Masterplan Stage 2 Plan

### OPTIONAL ITEMS \$32K-\$38K

- > Double BBQ including connecting required services (gas or electricity).
- > Seating nooks partially cut into the hill side.

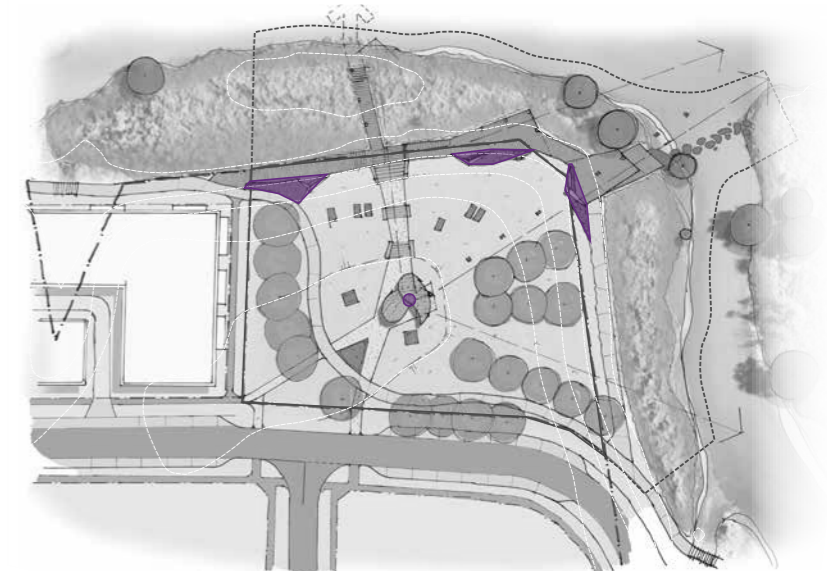


Figure 7C: F-01 Landscape Masterplan Optional Items Plan

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# F-03 TURRAS REACH FORESHORE PARK



Figure 8: F-03 PSP context plan

## PSP CONTEXT/ROLE

The PSP designates the site as a 'Parkland - Special Use (Foreshore)' with an open space area of 4.4 hectares. It specifies it is to be named 'Turras Reach Foreshore Park' and will provide district level playground and viewing area at high point overlooking the lake.

The future urban structure plan details/shows:

- > A state primary school and community centre opposite South Shore Road.
- > Becks Bay Village Centre, located to the west of the site, which will contain fine grain retail, supermarket, commercial and medium density residential.
- > South Shores Road (Connector Road) is planned as the southern boundary to the site.
- > A shared path running east west within the site.
- > District playground.
- > Civic space to be named 'Monash Square' in reference to the central civic space in the historic township of Yallourn located to the west of the site.

## DESIGN RESPONSE

- > To provide a series of overlapping and connected activities across the site that accommodate a variety of users.
- > To provide social spaces and shelter at the nexus of pathways and activities.
- > To protect and capitalise on views.
- > To provide safe access to water and surrounding landscape through a variety of water interface treatments.
- > To create views into the park from the surrounding roads and residential areas.
- > To locate formal playgrounds close to retail (cafe or restaurant uses preferred) for convenient passive and parental surveillance.
- > To provide a district playground that caters for all ages and abilities, encouraging inter-generational play.
- > To create clear shared path route that joins activities within the park and connects to the adjacent school, community centre and Becks Bay Village.
- > To retain and protect existing trees and vegetation where possible.
- > To use existing tree canopies for shade where possible.
- > To create shade and wind protection through tree planting and shelters.

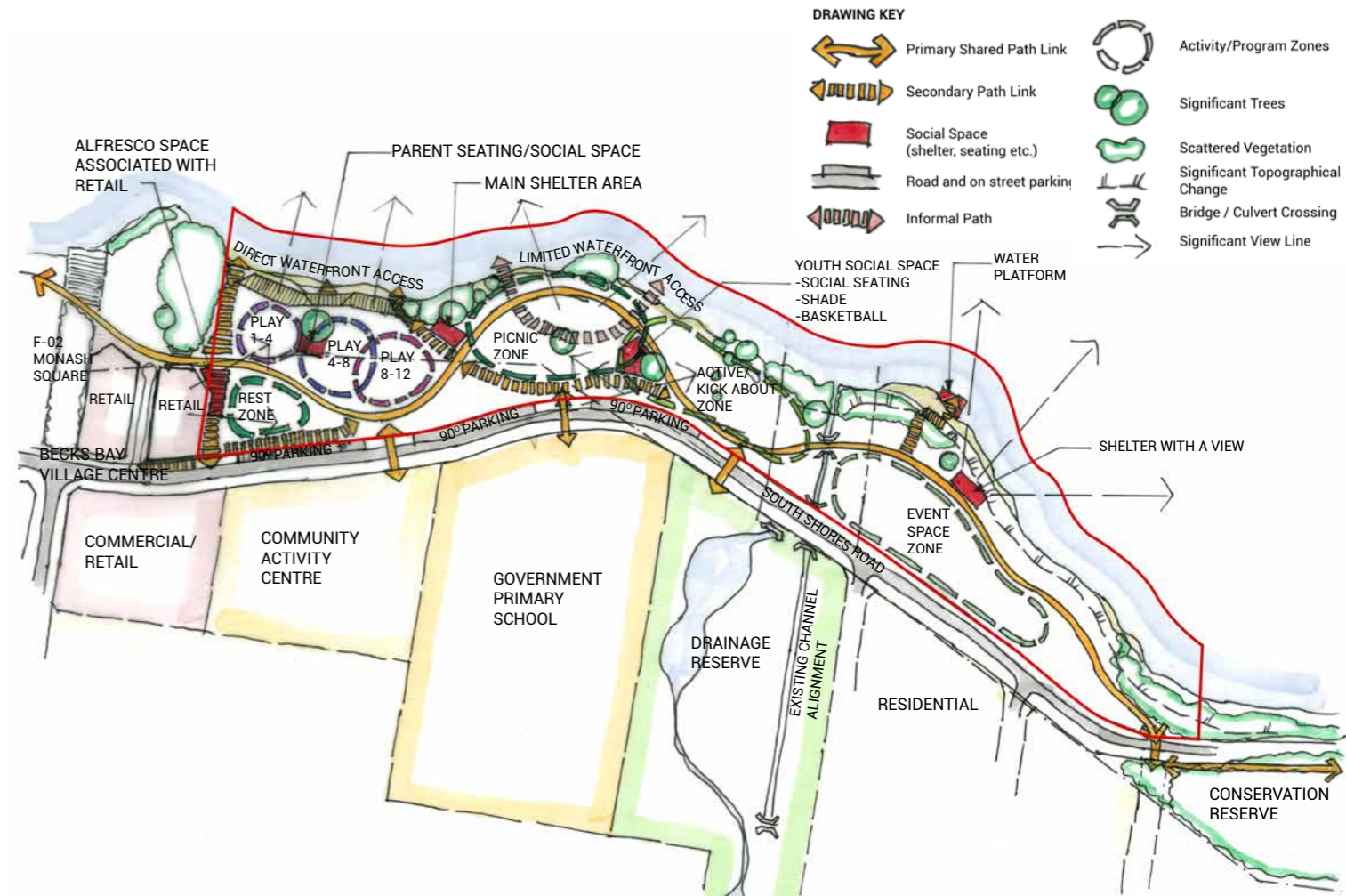


Figure 9: F-03 Design Response Plan



Figure 10: F-03 Site Photos

## EXISTING SITE CHARACTER

- > Elongated site falling to the north and west.
- > Elevated in the eastern area
- > Scattered vegetation mostly along the shore line. Several large canopy trees throughout site of landscape value. Dense vegetation in the east of the site.
- > Site currently used for hover crafts and model planes.
- > Partially exposed to wind along the south side of the site.
- > Largely void of existing vegetation.
- > Man made farm channels cut through the site.

## LANDSCAPE VISION

District level open space leverages the relationship to the future Becks Bay Village Centre and adapts/transitions around the natural features of Lake Narracan foreshore. The park will cater to a diverse range of user groups and age groups and will encourage interaction through overlapping uses and programs. All features of the park will be accessible to all and connections will be sympathetic to existing vegetation and consider adjacent land uses (e.g. primary school, community activity centre and drainage/conservation reserves).



### Key Uses/Infrastructure:

- > Playgrounds for all ages and accessibility
- > Circuit path for scooters and bikes.
- > Lighting
- > Water fountains
- > Bike Parking
- > Shelters
- > Convenient car parking
- > Youth social space
- > Kick about spaces
- > Picnic grounds
- > Half basketball court
- > Shared path network (must connect to School, CAC, drainage reserve and NAC)
- > Substantial tree planting

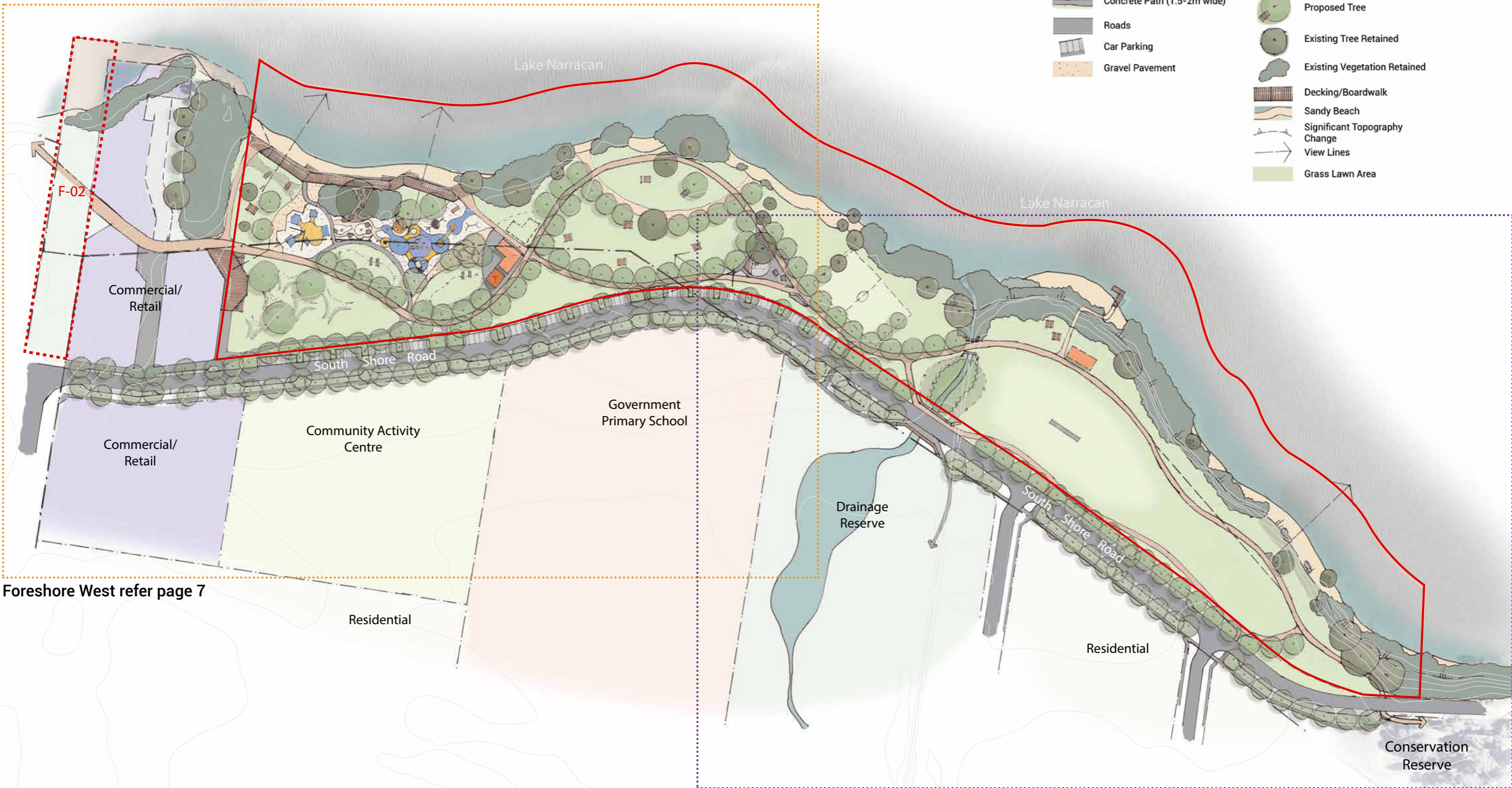


### Optional Uses/Infrastructure:

- > Water play area
- > Boardwalk lake edge
- > Skate/scooter trail

# F-03 TURRAS REACH FORESHORE PARK

## Overall Landscape Masterplan



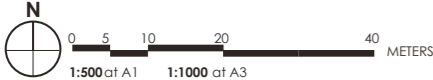
**DRAWING KEY**

- Site Boundary
- - - Existing Title Boundary
- - - Indicative Future Title Boundary
- ← Shared Path (2.5-3m wide)
- ▬ Concrete Path (1.5-2m wide)
- ▬ Roads
- ▭ Car Parking
- ▭ Gravel Pavement
- ◇ Toilets
- ◇ Picnic Shelter
- ▭ Seating
- Proposed Tree
- Existing Tree Retained
- Existing Vegetation Retained
- ▭ Decking/Boardwalk
- ▭ Sandy Beach
- ▭ Significant Topography Change
- View Lines
- ▭ Grass Lawn Area

Foreshore West refer page 7

Foreshore East refer page 8

Figure 11: F-03 Overall Landscape Masterplan



# F-03

## TURRAS REACH

### Landscape Masterplan

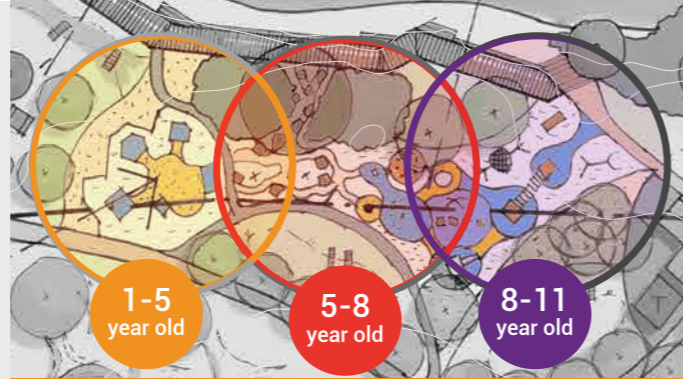


Figure 12: F-03 Playground Zones



Figure 13: F-03 Key Landscape Element Examples

- a** Alfresco dining with views of the toddler playground.
- b** Formal boardwalk edge with seating and frequent ramps or steps down to waters edge.
- c** Possible boardwalk extension to waterfront retail dining precinct.
- d** Water playground (all ages) close to the lake boardwalk and shelter. Playground design should reference Yallourn township history through abstract forms or activities. Water play may include water jets, mist sprays, interactive water channels and showers.
- e** Picnic grounds with substantial tree planting to increase shade and biodiversity.
- f** Main shelter located central to the western area with views of the picnic grounds, playgrounds and lake. The design should reference Yallourn historic township/ power plant through abstract forms.
- g** Possible second shelter.
- h** Resting grass mounds that interconnect to create social spaces.
- i** Ensure strong pedestrian connection to Becks Bay Village Centre.
- j** Clear, safe and convenient pedestrian crossings over South Shores Road to connect to school and community centre. This will likely be through the use of road threshold treatments or medians. Zebra crossings will not be appropriate in this location.
- k** F-02 Civic space to be named 'Monash Square' in reference to civic space at centre of the original township of Yallourn.
- l** Toilet co-located with retail uses.
- m** Toilet to be co-located with shelter



Figure 14: F-03 Foreshore West Landscape Masterplan



# F-03

## TURRAS REACH

### Landscape Masterplan

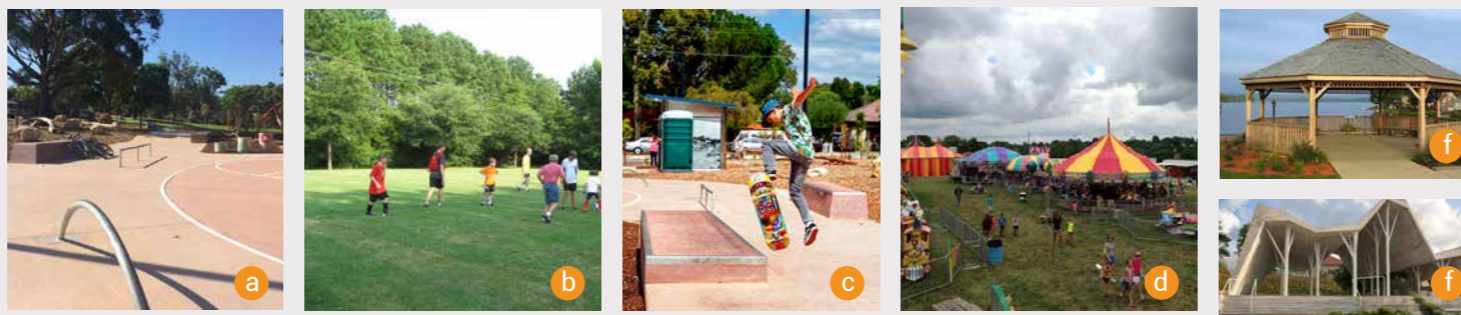


Figure 15: F-03 Key Landscape Element Examples

- a Youth social space** including half basketball court, creative seating opportunities, shade and landscape planting.
- b Informal Ball Sports** boarder by existing and planted trees utilising flat land. Potential for line marking and goal posts.
- c Informal skate elements/trail** located along the shared path and edges of the basketball court.
- d Open field/large events space.** Opportunity for informal ball games including cricket and football. Appropriate space for large annual community events.
- e** Utilise existing **waterway crossing**.
- f Pavilion** that is sympathetic to natural landscape and views and appropriate for use as event stage.
- g Resting place** with seating shade and lake views.
- h Shared path crossing** of South Shore Road due to vegetation and topographic constraints.
- i** Clear, safe and convenient **pedestrian crossings** over South Shore Road to connect surrounding residential and open space corridor. This will likely be through the use of road threshold treatments or medians. Zebra crossings will not be appropriate in this location.



Figure 16: F-03 Foreshore East Landscape Masterplan

# F-03 TURRAS REACH FORESHORE

## Opinion of Probable Cost

Site Area = ~4.7 hectares

Item	Description	Indicative Quantity	Unit	Indicative Rate	Cost (\$)			
					Full Construction (including optional items)	Stage 1	Stage 2	Optional
<b>1 Preliminary</b>					<b>\$165,000.00</b>			
1.1	Site establishment of: - Waste management, - Access management, - Security (fencing), - Tree protection zones, - Site water management, - Site amenities. (This is an indicative list of likely inclusions only)	1	item	Approx 15% of landscape works total cost	\$165,000.00	\$99,000.00	\$66,000.00	
<b>2 Demolition Works</b>					<b>\$2,500.00</b>			
2.1	Removal of unwanted vegetation	1	item	2500	\$2,500.00	\$2,500.00		
<b>3 Earthworks</b>					<b>\$24,000.00</b>			
3.1	Cut and fill by machine to an average depth of 300mm as required	3000	m <sup>2</sup>	8	\$24,000.00	\$12,000.00	\$12,000.00	
<b>4 Paving + Paths</b>					<b>\$427,000.00</b>			
4.1	Shared Path 3 metres wide	780	lin m	250	\$195,000.00	\$195,000.00		
4.2	Footpath 2-2.5 metres wide	660	lin m	170	\$112,200.00	\$112,200.00		
4.3	Edge footpath 1-1.5 metres wide	150	lin m	90	\$13,500.00	\$13,500.00		
4.4	Concrete paved area (shelter and basketball court)	830	m <sup>2</sup>	90	\$74,700.00	\$37,350.00	\$37,350.00	
4.5	Gravel paved area/path 2.5 metres wide with timber edge	790	m <sup>2</sup>	40	\$31,600.00	\$31,600.00		
<b>5 Planting</b>					<b>\$31,600.00</b>			
5.1	Tree planting (45L) including mulch ring and minimum 3 support stakes	90	no.	200	\$18,000.00	\$18,000.00		
5.2	Re-vegetation works along waterway	660	m <sup>2</sup>	10	\$6,600.00	\$6,600.00		
5.3	Shore line clean and re-vegetate	1	item	7000	\$7,000.00	\$7,000.00		
<b>6 Features</b>					<b>\$365,000.00</b>			
6.1	Grass mounding	5	item	3000	\$15,000.00			\$15,000.00
6.2	Boardwalk/decking along shores edge with steps to the access the shore.	700	m <sup>2</sup>	350	\$245,000.00	\$122,500.00	\$122,500.00	
6.2	Boardwalk/decking along retail frontage	300	m <sup>2</sup>	350	\$105,000.00		\$105,000.00	
<b>7 Grassing</b>					<b>\$54,900.00</b>			
7.1	Re-establish healthy grassed lawn areas strategically across the site in designated picnic areas	6100	m <sup>2</sup>	9	\$54,900.00	\$27,450.00	\$27,450.00	
<b>8 Furniture/Structures</b>					<b>\$447,000.00</b>			
8.1	Picnic setting (table and bench seats)	14	item	4000	\$56,000.00	\$56,000.00		
8.2	Lounge chairs	6	item	2000	\$12,000.00			\$12,000.00
8.3	Bench seat	3	item	1000	\$3,000.00	\$3,000.00		
8.4	Custom built social seating around basketball court area	1	item	6000	\$6,000.00		\$6,000.00	
8.5	Large picnic shelter.	2	item	25000	\$50,000.00	\$25,000.00	\$25,000.00	
8.6	Performance pavilion shelter (east of site)	1	item	35000	\$35,000.00		\$35,000.00	
8.7	BBQ (2 panel)	2	item	10000	\$20,000.00			\$20,000.00
8.8	BBQ connection to services (electric or gas)	1	item	15000	\$15,000.00			\$15,000.00
8.9	Toilet block	1	item	250000	\$250,000.00		\$250,000.00	
<b>9 Play Equipment</b>					<b>\$280,000.00</b>			
9.1	Play area 1-5 year olds	500	m <sup>2</sup>	150	\$75,000.00	\$75,000.00		
9.2	Play area 5-8 year olds	500	m <sup>2</sup>	170	\$85,000.00	\$85,000.00		
9.3	Play area 8-11 year olds	500	m <sup>2</sup>	180	\$90,000.00		\$90,000.00	
9.4	Water play elements	5	item	6000	\$30,000.00		\$30,000.00	
<b>10 Sporting Equipment</b>					<b>\$20,000.00</b>			
10.1	Skate board element (ramp, grind rail etc.)	4	item	3000	\$12,000.00		\$12,000.00	
10.2	Basketball ring and line marking	1	item	4000	\$4,000.00		\$4,000.00	
10.3	Grass markers for informal soccer field	1	item	4000	\$4,000.00			\$4,000.00
<b>11 Access + Car parking</b>					<b>\$127,000.00</b>			
11.1	On-street 90° car parking along South Shore Road	1270	m <sup>2</sup>	100	\$127,000.00	\$127,000.00		
<b>11 Maintenance</b>					<b>\$39,000.00</b>			
11.1	Maintain for duration of establishment period, including existing trees and reinstatement areas, fertiliser, watering, top-up mulch.	26	weeks	1500	\$39,000.00	\$19,500.00	\$19,500.00	
					<b>Full Construction (including optional items)</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Optional</b>
<b>LANDSCAPE WORKS TOTAL (exclusive of GST)</b>					<b>\$1,983,000.00</b>	<b>\$1,075,200.00</b>	<b>\$841,800.00</b>	<b>\$66,000.00</b>
<b>Contingency (10%)</b>					<b>\$2,181,300.00</b>	<b>\$1,182,720.00</b>	<b>\$925,980.00</b>	<b>\$72,600.00</b>

### STAGE 1 ITEMS \$1.1M-\$1.2M

- > High quality playground area and equipment for ages 1-8.
- > Shared path across the site from east to west.
- > Footpaths linking into surrounding uses and amenity.
- > Large picnic shelter.
- > Car parking along South Shore Road.
- > In fill tree planting across the site.
- > Re-vegetation works along the waterway and shore line
- > Formal decking along shores edge (Part)
- > Picnic settings (table & bench) located across the site.
- > Bench seating located strategically across the site
- > Removal of unwanted vegetation.

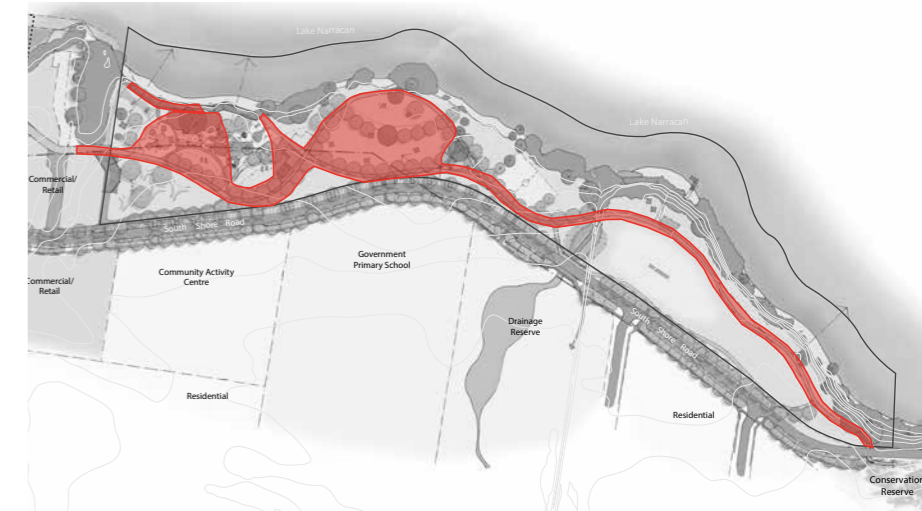


Figure 17A: F-03 Landscape Masterplan Stage 1 Plan

### STAGE 2 ITEMS \$840K-\$930K

- > Expansion of playground area and equipment for ages 8 - 11.
- > Expansion of playground to include water play elements.
- > Youth social space integrating.
  - > Half basketball court.
  - > Custom seating area.
  - > Skate elements.
- > Second large shelter.
- > Toilet facilities.
- > Pavilion suitable for event performance use.
- > Boardwalk decking along retail frontage to support alfresco dining and activation.
- > Extension of formal decking along shores edge.



Figure 17B: F-03 Landscape Masterplan Stage 2 Plan

### OPTIONAL ITEMS \$70K-\$80K

- > Double BBQ including connecting required services (gas or electricity).
- > Grass mounds that create social seating spaces.
- > Lounge chairs in strategic location overlooking the shore.
- > Informal marked soccer field



Figure 17C: F-03 Landscape Masterplan Optional Items Plan

# F-03 TURRAS REACH FORESHORE PARK



Figure 18: F-04 PSP context plan

## PSP CONTEXT/ROLE

The PSP designates the site as a 'Parkland - Special Use (Foreshore)' with an open space area of 4.05 hectares which includes the foreshore, existing jetty and beach.

The future urban structure plan details/shows:

- > A state primary school and community centre opposite South Shore Road.
- > Fernlea Village Centre, located opposite South Shore Road, contains fine grain retail, potential supermarket and medium density residential.
- > Potential holiday park re-located on the opposite side of South Shore Road and east of the waterway.
- > South Shores Road (Connector Road) is planned as the southern boundary to the site.
- > A shared path running east west within the site.
- > South Shore Road is relocated to the north and is detailed to be slow speed with designated pedestrian priority crossing between beach area and adjacent shops.

## EXISTING SITE CHARACTER

- > Elongated site falling to the north.
- > Heavily vegetated with three distinct clearings.
- > Clearings are mostly sheltered from wind with the exception of the north east peninsula clearing.
- > West of the site is used by Naval Cadets for lake access.
- > The main beach clearing is currently used for picnic and passive recreation.
- > Well formed beach area with path access and adjacent grassed areas.
- > Iconic curved jetty
- > Short boardwalk along shore connecting main beach to eastern area.
- > Two farm channels cut through the site.

## DESIGN RESPONSE

- > To enhance access and the experience of the existing landscape character.
- > To formalise the role of the three distinct areas of the site whilst ensuring connectivity between them.
- > To promote and encourage walking and cycling through and circulating around the site.
- > To provide social spaces and shelter at convenient location near parking and that does not compromise views.
- > To expand the main beach foreshore area through strategic location of car parking.
- > To increase direct beach access through alternative path design and
- > To prevent foreshore erosion through appropriate edge treatments.
- > To locate the shared path within existing clearings, tracks and roads avoiding the removal of trees.
- > To provide further picnic facilities throughout the site to cater for increased use.
- > To retain and protect existing trees and vegetation where possible.
- > To use existing tree canopies for shade where possible.
- > To create shade and wind protection through tree planting particularly in the east of the site.

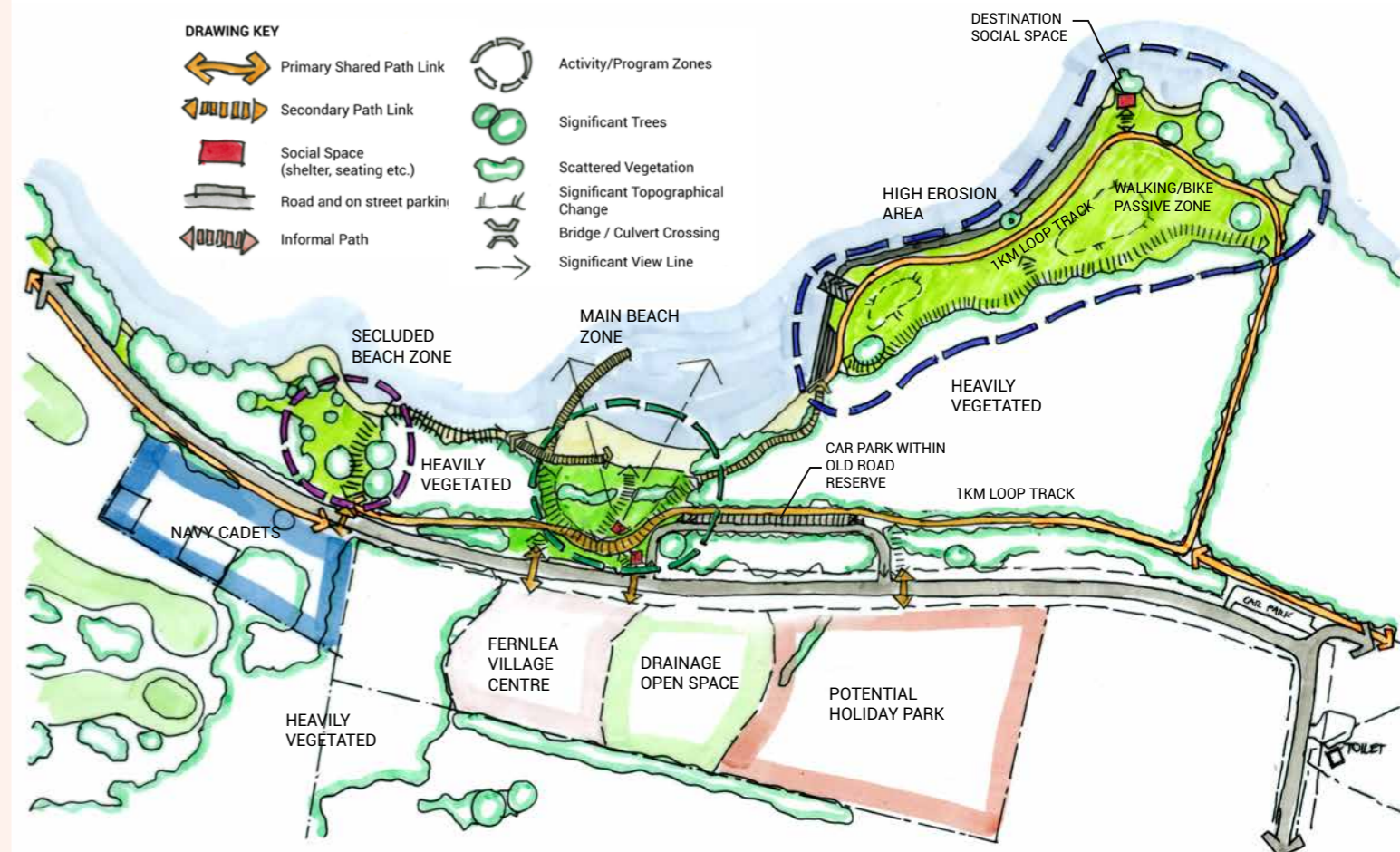


Figure 19: F-04 Design Response Plan



Figure 20: F-04 Site Photos

## LANDSCAPE VISION

An expanded district level open space with a focus on enhancing/emphasising the existing natural environment and built landscape character. **Interconnected paths and boardwalks will allow pedestrians and cyclists to explore the diverse types of spaces along this section of foreshore. Access to the park will be convenient but not without regard to existing vegetation and the enhancement of views and vistas to the lake from the road and Fernlea Village.**



### Key Uses/Infrastructure:

- > Shelter
- > BBQ
- > Toilet
- > Picnic seating
- > Lawn picnic areas
- > Walking circuit
- > Water fountains
- > Bike Parking
- > Convenient car parking
- > Unique seating places
- > Jetty



### Optional Uses/Infrastructure:

- > Mountain bike circuit
- > Mountain bike trick elements
- > Secondary eastern carpark
- > Expansion of boardwalk
- > Terraced foreshore

# F-04 FERNLEA FORESHORE

## Overall Landscape Masterplan

Foreshore East refer page 13

### DRAWING KEY

- |  |                                  |  |                              |  |                               |
|--|----------------------------------|--|------------------------------|--|-------------------------------|
|  | Site Boundary                    |  | Toilets                      |  | Decking/Boardwalk             |
|  | Existing Title Boundary          |  | Picnic Shelter               |  | Sandy Beach                   |
|  | Indicative Future Title Boundary |  | Seating                      |  | Significant Topography Change |
|  | Shared Path (2.5-3m wide)        |  | Proposed Tree                |  | View Lines                    |
|  | Concrete Path (1.5-2m wide)      |  | Existing Tree Retained       |  | Grass Lawn Area               |
|  | Roads                            |  | Existing Tree Retained       |  |                               |
|  | Car Parking                      |  | Existing Vegetation Retained |  |                               |
|  | Gravel Pavement                  |  |                              |  |                               |

Foreshore West refer page 12

Foreshore East Carpark refer page 10

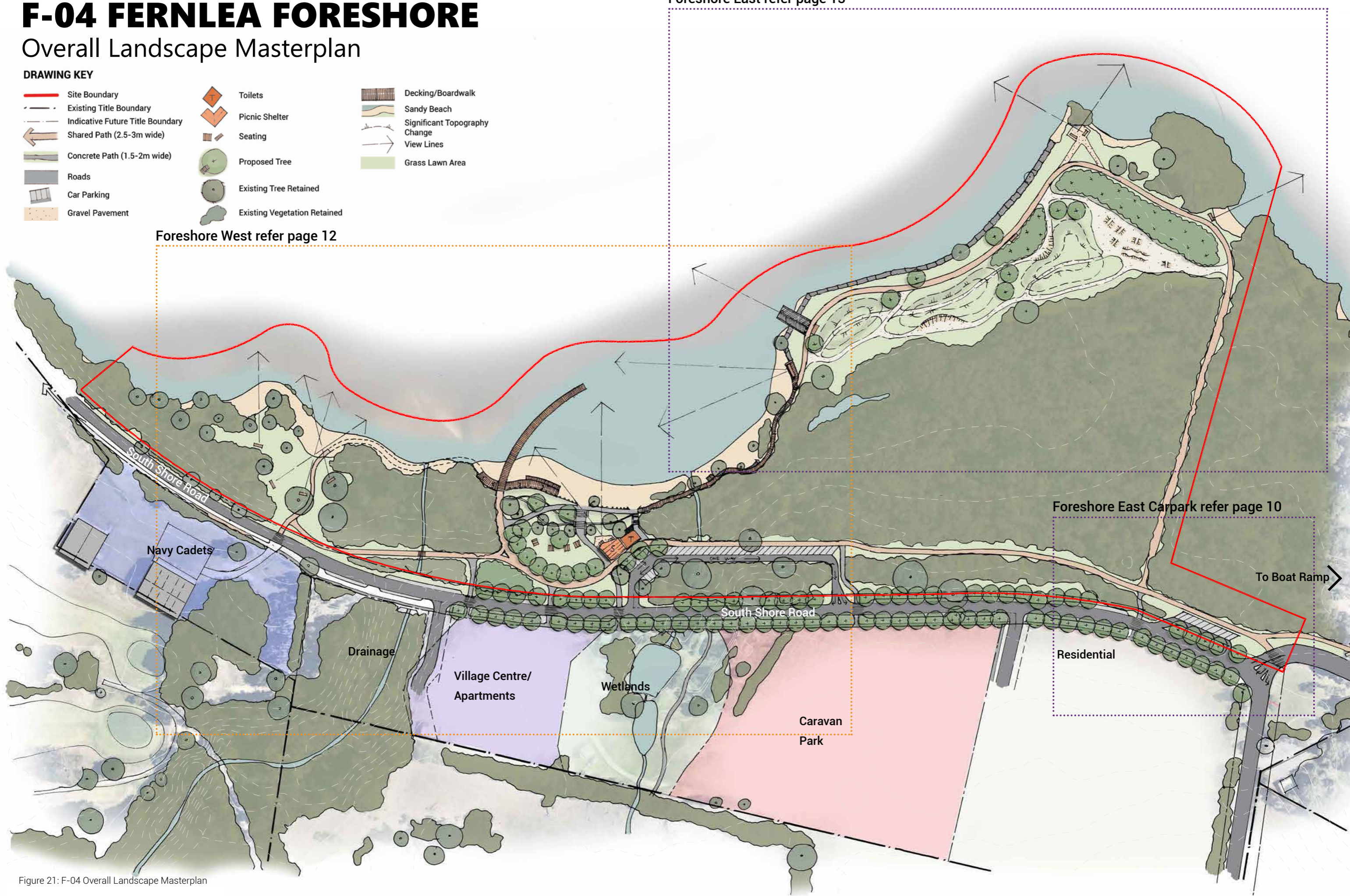
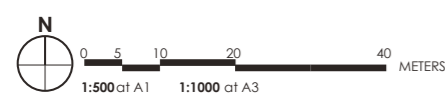


Figure 21: F-04 Overall Landscape Masterplan



# F-04 FERNLEA

## FORESHORE EAST

### Landscape Masterplan



Figure 22: F-04 Key Landscape Element Examples

- a** Extend boardwalk sideways to create new access points to the shoreline.
- b** Remove existing carpark to significantly **expand the foreshore picnic area**.
- c** Use existing road reserve for one way **car park** through road avoiding the removal of additional vegetation and maximising foreshore open space.
- d** Use existing road alignment for **shared path**.
- e** Formalise edges to surrounding trees and position new seating with **unique framed views** of the lake.
- f** **Terraced** grassed picnic areas leading down to the shoreline.
- g** **Central stairs** to provide direct access to the water from the shelter.
- h** **Defined crossings** of South Shore Road. This will likely be through the use of road threshold treatments or medians. Zebra crossings will not be appropriate in this location.
- i** **Shelter** with BBQ, seating and views across the lake.
- j** **Toilet** located away from the active area but convenient to the carpark and shelter.
- k** **Informal walk along shoreline**. Consider future extension of boardwalk.



Figure 23: F-04 Foreshore East Landscape Masterplan

# F-04 FERNLEA FORESHORE EAST Landscape Masterplan

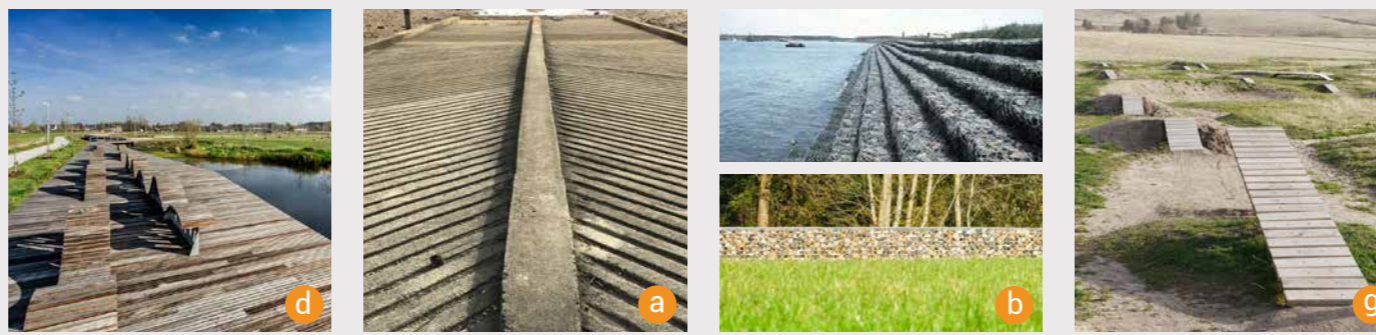


Figure 24: F-04 Key Landscape Element Examples

- a** Retain **Boat Ramp** as landscape feature. Strategically place bollards or furniture to prevent vehicle access.
- b** Progressively upgrade retaining wall with **gabion wall** or similar as maintenance is required
- c** Locate **seating** with clear views of the Lake and at even intervals along the shared path.
- d** Extended **boardwalk platform** with seating and views back over the jetty foreshore area.
- e** Consolidate existing fill piles and source clean fill from nearby development into rolling low **level mounds**.
- f** Undertake **substantial tree planting** to create wind breaks.
- g** Informal **mountain bike circuits and simple trick elements** that weave throughout the open space.
- h** Use existing access track as **shared path trail**.
- i** **Bike user carpark** with convenient access to the shared path. Alleviating the use of the board walk to gain access to the northern area.
- j** Connection through to **boat ramp area**.



Figure 25: F-04 Foreshore West Landscape Masterplan

# F-04 FERNLEA FORESHORE

## Opinion of Probable Cost

Site Area = ~9.3 hectares

Item	Description	Indicative Quantity	Unit	Indicative Rate	Full Construction (including optional items)	Cost (\$)			
						Stage 1	Stage 2	Optional	
<b>1 Preliminary</b>						<b>\$100,000.00</b>			
1.1	Site establishment of: - Waste management, - Access management, - Security (fencing), - Tree protection zones, - Site water management, - Site amenities. (This is an indicative list of likely inclusions only)	1	item	15% of landscape works total cost	\$100,000.00	\$70,000.00	\$30,000.00		
<b>2 Demolition Works</b>						<b>\$7,500.00</b>			
2.1	Removal of unwanted vegetation	1	item	3500	\$3,500.00	\$3,500.00			
2.2	Removal of existing car park pavement	1	item	Removed through construction of South Shore Road Upgrade					
2.3	Removal of Timber fence	1	item	1000	\$1,000.00	\$1,000.00			
2.4	Removal of rock mounds in east of site (re-distribution of suitable soil to form mounding's for bike circuit)	1	item	3000	\$3,000.00		\$3,000.00		
<b>3 Earthworks</b>						<b>\$40,000.00</b>			
3.1	Cut and fill by machine to an average depth of 300mm as required	5000	m <sup>2</sup>	8	\$40,000.00	\$24,000.00	\$16,000.00		
<b>4 Paving + Paths</b>						<b>\$252,600.00</b>			
4.1	Shared Path 3 metres wide	650	lin m	200	\$130,000.00	\$130,000.00			
4.2	Footpath 2-2.5 metres wide	220	lin m	150	\$33,000.00	\$33,000.00			
4.3	Formal Gravel paved area with concrete or steel edge (under Shelter)	430	m <sup>2</sup>	40	\$17,200.00	\$12,040.00	\$5,160.00		
4.4	Gravel path 2.5m wide with timber edge.	350	lin m	50	\$17,500.00		\$17,500.00		
4.5	Gravel path 1-2m wide (Mountain bike circuit)	1100	lin m	15	\$16,500.00			\$16,500.00	
4.6	Informal Gravel paved area with timber edge (Mountain bike skills area)	1200	m <sup>2</sup>	12	\$14,400.00			\$14,400.00	
4.7	Concrete staircase from shelter to shore with retaining walls	2	item	12000	\$24,000.00	\$24,000.00			
<b>5 Planting</b>						<b>\$20,350.00</b>			
5.1	Tree planting (45L) including mulch ring, fertiliser and minimum 3 support stakes	23	no.	200	\$4,600.00	\$4,600.00			
5.2	Tree planting (20mm pot) including mulch ring in group planting areas	50	no.	15	\$750.00	\$750.00			
5.3	Shore line clean and re-vegetation	1	item	15000	\$15,000.00	\$15,000.00			
<b>6 Features</b>						<b>\$222,500.00</b>			
6.1	Terraced lawn area with curved artistic retaining walls creating interesting picnic and seating areas.	1	item	20000	\$20,000.00	\$20,000.00			
6.2	Boardwalk/decking along shores edge with ramps to the access the shore.	370	m <sup>2</sup>	250	\$92,500.00	\$64,750.00	\$27,750.00		
6.3	Gabion wall along eastern shore line	220	lin m	500	\$110,000.00		\$110,000.00		
<b>7 Grassing</b>						<b>\$23,760.00</b>			
7.1	Re-establish healthy grassed lawn areas strategically across the site in designated picnic areas	2640	m <sup>2</sup>	9	\$23,760.00	\$16,632.00	\$7,128.00		
<b>8 Furniture/Structures</b>						<b>\$335,000.00</b>			
8.1	Picnic setting (table and bench seats)	7	item	4000	\$28,000.00	\$28,000.00			
8.2	Bench seat	9	item	1000	\$9,000.00	\$9,000.00			
8.3	Large picnic shelter.	1	item	25000	\$25,000.00	\$25,000.00			
8.4	BBQ (2 panel)	1	item	8000	\$8,000.00			\$8,000.00	
8.5	BBQ connection to services (electric or gas)	1	item	15000	\$15,000.00			\$15,000.00	
8.6	Toilet block	1	item	250000	\$250,000.00		\$250,000.00		
<b>10 Sporting Equipment</b>						<b>\$16,000.00</b>			
10.1	Mountain bike skills element (berm, balance ramp, jump) constructed from timber or gravel mounding	8	item	2000	\$16,000.00			\$16,000.00	
<b>11 Access + Car parking</b>						<b>\$210,000.00</b>			
11.1	Main carpark utilising existing South Shore Road reserve	1550	m <sup>2</sup>	100	\$155,000.00	\$155,000.00			
11.2	Secondary carpark east of site	550	m <sup>2</sup>	100	\$55,000.00		\$55,000.00		
<b>13 Maintenance</b>						<b>\$39,000.00</b>			
13.1	Maintain for duration of establishment period, including existing trees and reinstatement areas, fertiliser, watering, top-up mulch.	26	weeks	1500	\$39,000.00	\$19,500.00	\$19,500.00		
						<b>Full Construction (including optional items)</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Optional</b>
<b>LANDSCAPE WORKS TOTAL (exclusive of GST)</b>						<b>\$1,266,710.00</b>	<b>\$655,772.00</b>	<b>\$541,038.00</b>	<b>\$69,900.00</b>
<b>Contingency (10%)</b>						<b>\$1,393,381.00</b>	<b>\$721,349.20</b>	<b>\$595,141.80</b>	<b>\$76,890.00</b>

Table 3: F-04 Landscape Masterplan High-level OPC

### STAGE 1 ITEMS \$650K-\$725K

- > High quality playground area and equipment for ages 1-8.
- > Shared path across the site from east to west using part of the existing South Shore Road in the interim.
- > Footpaths linking into surrounding uses and amenity.
- > Expanded foreshore area.
- > Large picnic shelter.
- > Terraced foreshore area with increased access to beach.
- > New off street car park.
- > In fill tree planting across the site.
- > Re-vegetation works along the waterways and shore line.
- > Expanded decking area.
- > Picnic settings (table & bench) located across the site.
- > Bench seating located strategically across the site



Figure 26A: F-04 Landscape Masterplan Stage 1 Plan

### STAGE 2 ITEMS \$540K-\$600K

- > Viewing platform in east of site.
- > Gravel path walking/bike track (1km loop) into eastern area use part of the existing access tracks.
- > Toilet block.
- > Second car park in east of site.
- > Gabion wall along shore line.
- > Removal/re-distribution of rock mound in eastern area of site.



Figure 26B: F-04 Landscape Masterplan Stage 2 Plan

### OPTIONAL ITEMS \$68K-\$77K

- > Mountain bike skills park including jumps, berms, balance rails etc.
- > Double BBQ including connecting required services (gas or electricity).
















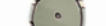



Figure 26: F-04 Landscape Masterplan Optional Items Plan



**APPENDIX: A**  
LANDSCAPE MASTERPLANS

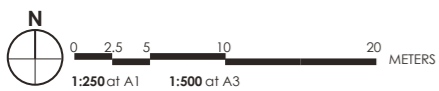


**DRAWING KEY**

-  Site Boundary
-  Existing Title Boundary
-  Indicative Future Title Boundary
-  Shared Path (2.5-3m wide)
-  Concrete Path (1.5-2m wide)
-  Roads
-  Car Parking
-  Gravel Pavement
-  Seating
-  Proposed Tree
-  Existing Tree Retained
-  Existing Vegetation Retained
-  Decking/Boardwalk
-  Sandy Beach
-  Significant Topography Change
-  View Lines
-  Grass Lawn Area

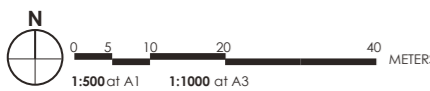
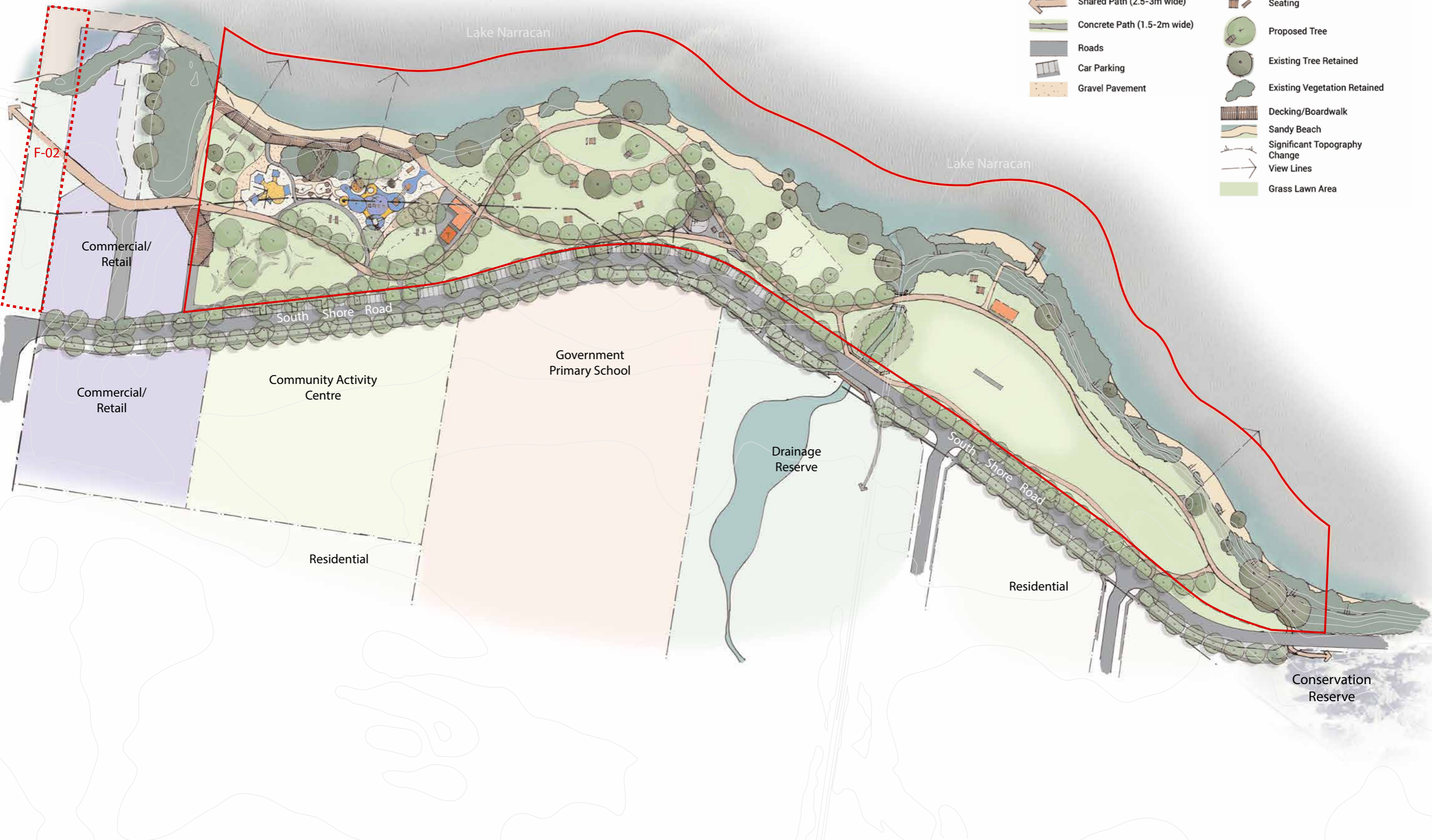
Future Medium Density

SOUTH SHORE ROAD



**DRAWING KEY**

-  Site Boundary
-  Existing Title Boundary
-  Indicative Future Title Boundary
-  Shared Path (2.5-3m wide)
-  Concrete Path (1.5-2m wide)
-  Roads
-  Car Parking
-  Gravel Pavement
-  Toilets
-  Picnic Shelter
-  Seating
-  Proposed Tree
-  Existing Tree Retained
-  Existing Vegetation Retained
-  Decking/Boardwalk
-  Sandy Beach
-  Significant Topography Change
-  View Lines
-  Grass Lawn Area



**DRAWING KEY**

- |  |                                  |  |                              |  |                               |
|--|----------------------------------|--|------------------------------|--|-------------------------------|
|  | Site Boundary                    |  | Toilets                      |  | Decking/Boardwalk             |
|  | Existing Title Boundary          |  | Picnic Shelter               |  | Sandy Beach                   |
|  | Indicative Future Title Boundary |  | Seating                      |  | Significant Topography Change |
|  | Shared Path (2.5-3m wide)        |  | Proposed Tree                |  | View Lines                    |
|  | Concrete Path (1.5-2m wide)      |  | Existing Tree Retained       |  | Grass Lawn Area               |
|  | Roads                            |  | Existing Tree Retained       |  |                               |
|  | Car Parking                      |  | Existing Vegetation Retained |  |                               |
|  | Gravel Pavement                  |  |                              |  |                               |

