TABLED DOCUMENT

ITEM NO. 2

2) NELSON BAY PUBLIC DOMAIN PLAN

ORDINARY COUNCIL MEETING 23 JULY 2019







Nelson Bay Public Domain

Nelson Bay Public Domain Plan

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June 2019

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Nelson Bay Public Domain Plan 2019

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Supported by the



This project was funded by Port Stephens Council and the Australian Government, and administered on behalf of the NSW Government by the NSW Department of Industry.

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1. Introduction.

Nelson Bay hosts pristine sheltered bays and a stunning natural environment. In order to remain attractive and competitive as a key tourism destination, as well as a sustainable and unique place to live, the Town Centre public domain requires rejuvenation. This Public Domain Plan will guide future improvement works, aligning previous strategies, expectations and strategic implementation.



1.1 Background

1.2 Aim Of Public Domain Plan

1.3 Document Structure

Nelson Bay is a primary town centre of Port Stephens, and a major tourism and service centre of the Tomaree Peninsula, due to its position and outstanding natural environment.

In competition with other coastal centres elsewhere in NSW, like Port Macquarie and Coffs Harbour, and increasingly overseas, Nelson Bay has been left behind in terms of attracting investment and residents. The town experiences high seasonal variations in tourism.

In order for Nelson Bay to remain competitive and attractive, it is important to rejuvenate the Town Centre and Foreshore to make it an unique destination with high quality amenity.

In 2012 Port Stephens Council adopted the Nelson Bay Town Centre and Foreshore Strategy (the Strategy) seeking to guide Nelson Bay towards a more attractive place for tourists, local businesses and residents.

Port Stephens Council further undertook a series of supporting studies and adopted several planning policies and controls between 2012 and 2017, such as:

- Nelson Bay Town Centre and Foreshore Improvement Program, April 2012
- Development Control Plan, 2014
- Apex Park Masterplan, 2015
- Public Art Policy and Guidelines, 2015
- Heritage Policy, 2015
- Nelson Bay/Shoal Bay Pathways Plan, 2016
- Nelson Bay Traffic and Parking Study Update, 2017
- Capital Works Program, 2017-2018

However there has been limited private investment in the Town Centre since the Strategy's adoption.

Council therefore undertook a review of the Strategy and the supporting Improvement Program. On 25 September 2018, Council adopted the 'Progressing the Nelson Bay Town Centre and Foreshore Strategy: A Revised Implementation and Delivery Program' (Delivery Program). A key recommendation of the Delivery Program is to prepare a Public Domain Plan (the Plan). The Nelson Bay Public Domain Plan is a 20 year vision to guide all future public domain improvement works necessary to revitalise the Nelson Bay Town Centre and Foreshore. The Plan is to ensure investment in the public domain contributes to the overarching vision for the Town, and in turn encourages investment.

The improvement works, as mostly identified in the Strategy, include:

- Upgrading streetscapes, better defining and improving view corridors, improving pedestrian connectivity, and creating a strong pedestrian "spine" along Stockton Street to the waterfront;
- Upgrading wayfinding to improve the visitor's experience of Nelson Bay and to bring the Town Centre and the waterfront closer together;
- Reinforcing the character of key places;
- Reviewing the Apex Park Masterplan and Apex Park interface;
- Establishing public art and events locations and developing a coherent strategy for street elements.

Through the Public Domain Plan, we aim to achieve:

- A well preserved natural environment;
- A friendly walking and cycling environment to reinforce pedestrian and cyclists' connection between the Town Centre and Foreshore, and minimise the impact of vehicular traffic on pedestrians;
- A welcoming and convenient, evocative and memorable place, which supports the social and cultural history of Nelson Bay and enhances its character, public amenity and safety.

The Plan is to establish the design coordination and technical links necessary to facilitate integration between council's vision, community expectations, design strategies, guidelines and implementation. The deliverables of the Nelson Bay Public Domain Plan include five components, which are one primary document and four supporting documents.

The primary document, being the Nelson Bay Public Domain Plan Report, incorporates the vision, analysis and high level design responses and strategies. It is to be used as an overarching element and in coordination with the technical links elaborated in the supporting documents.

Supporting documents are:

- Wayfinding Strategy and Signage Suite
- Streetscape Design Guideline
- Street Tree Master Plan
- Public Domain Improvements Implementation Plan

The nature of the Public Domain Plan and the supporting documents is such that they are living documents. They address the main issues and set the framework and tone for future design activities. The development of works for actual construction is an extension of this process and will need to be undertaken on a similar rigorous basis. Nevertheless, this Plan and supporting documents, together with community support and Council's initiatives, provide a sound platform from which to embark.

1.4 Design Philosophy & Process

Creating an outstanding public domain environment is dependent upon the implementation of successful placemaking. It requires an understanding of the natural environment and ecological value of the Peninsula, the patterns of urban development and the cultural heritage of the town, as well as the local community who are passionate about Nelson Bay.

It's important to further understand the influences of public domain upon natural environment, people and place. Environmental and ecological, physical, cultural, social and commercial factors need to be taken into account during the analysis. A synthesis of the issues and a rational and innovative design process needs to result.

The development of the Plan has been undertaken in 6 stages, commencing in April 2018:

- Stage 1 Background Research and Analysis
- Stage 2 Development of Vision, Design Principles and Concept Ideas
- Stage 3 Workshop and Community Consultation
- Stage 4 Draft Nelson Bay Public Domain Plan and supporting documents
- Stage 5 Public Exhibition
- Stage 6 Review feedback and finalisation of the Nelson Bay Public Domain Plan

Note

Images within this document are representations of a 20 year vision. Subject to further detailed design requirements that may result from consideration of;

- -Underground services tree root zones, service corridors and utilities
- -Overhead services power lines
- Topography, WSUD or sustainability principles in the design

2. Vision.

Nelson Bay will become a unique destination for both tourists and local residents, to live, work, play and stay. The Town Centre and Foreshore is envisaged as an interlinked active place that celebrates its unique identity as a Town by the Bay.

It will continue to play its vital role as a tourist centre within the Tomaree Tourism and Lifestyle Growth Area in Port Stephens LGA, sustaining population and employment growth over the next 20 years. As a **Town by the Bay**, it will continue to celebrate its unique land-form, rich biodiversity and outstanding marine and coastal environment. Nelson Bay offers diverse fun-filled water-based activities and a relaxing coastal lifestyle.

Nelson Bay will lead as an example for environmental sustainability, preserving and enhancing its natural environment for generations to come.

It will celebrate the region's culture and heritage, from the aboriginal village green of the Worimi people, to the town's rich fishing and military history.

As a Town by the Bay, it will provide seamless connections between the Town Centre and Foreshore, where cafés and boutique retail destinations meet high quality marina restaurants. The streets and public spaces will be convenient, exciting and safe for people to use, and visually vibrant, both day and night all year-round. Nelson Bay, a thriving place that is leaping forward into its NEXT chapter.



3. Understanding Context.

Nelson Bay, one of the largest towns in the Port Stephens area, is located on the Tomaree Peninsula, just inside the mouth of Port Stephens, a large natural harbour along the east coast of New South Wales.

Nelson Bay is the main entry point for enjoying the pristine Port Stephens waterway, particularly for dolphin and whale watching, fishing and other recreational aquatic activities.



Regional Context 3.1

3.2 Local Context

Nelson Bay is located 60 km north-east of Newcastle and 200 km from Sydney, on the Tomaree Peninsula of Port Stephens.

Nelson Bay is joined along the Peninsula with the coastal settlements of Anna Bay, Fishermans Bay, Fingal Bay, Shoal Bay, Salamander Bay and Soldiers Point. These distinct areas are separated by natural bush land and hilly topography, which provides a dramatic backdrop to picturesque coastal views.

Preserving and enhancing this sensitive and unique regional context, which contributes to the distinct character of each bay within the Peninsula, is a fundamental consideration.

The main access to Nelson Bay is via Nelson Bay Road. Traffic passes either through or around Nelson Bay Town Centre in order to reach the smaller centres to the east, such as Shoal Bay and Fingal Bay.

Nelson Bay is located within the Tomaree Tourism and Lifestyle Growth Area as identified in Port Stephens Planning Strategy 2011. Nelson Bay Tourism Precinct has been identified as a "strategic centre" by the Hunter Regional Plan, which will be "the focus for population and/or economic growth over the next 20 years".



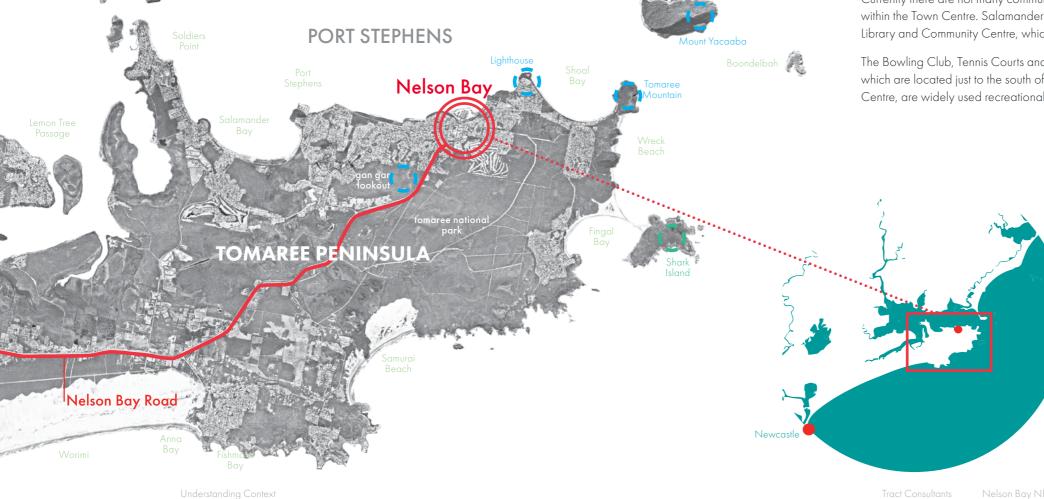
It contains a number of retail and hospitality venues. However, activation of the Town Centre is seasonal, with high variation in the tourism population.

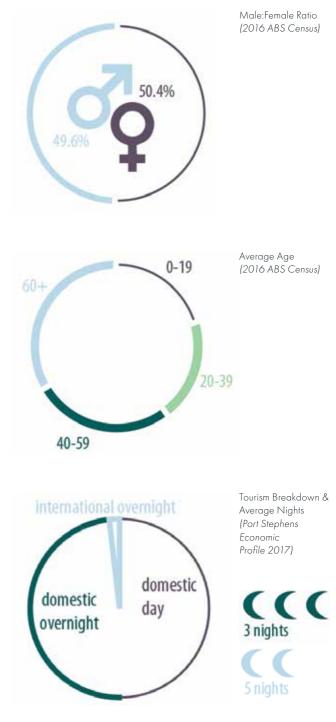
Prior to Nelson Bay's Woolworths supermarket, the Salamander Centre was the main destination for the Tomaree Peninsula's weekly shopping, whilst Nelson Bay's retail focused on leisure shopping, cafés and restaurants and tourist services.

There is a substantial local population of approximately 5,000 in the suburb, with a significant proportion of retirees.

Currently there are not many community facilities and services within the Town Centre. Salamander Bay provides Tomaree Library and Community Centre, which are 8km away.

The Bowling Club, Tennis Courts and Golf Club, which are located just to the south of the Town Centre, are widely used recreational facilities.





4. Understanding Nelson Bay.

To better understand Nelson Bay, we undertook a thorough site analysis study, as well as community consultation with stakeholders.

The key findings are summarised in this section, with detailed results included in the Appendix.



4.1 Understanding Natural Environment

EXISTING SCENIC VALUE

Nelson Bay is surrounded by outstanding natural beauty, with Port Stephens water body and the marina to the north and the forested hills of Tomaree National Park to the south. Its rich, unique marine and bush environment provides the major attraction for tourists and residents.

The ancient volcanic topography provides a slow reveal of picturesque water views whilst approaching the Town Centre and the Foreshore, either from the main axis of Stockton Street or along Government Road.

EXISTING ECOLOGICAL VALUE

Nelson Bay is adjacent to Port Stephens Great Lakes Marine Park's rich marine biodiversity, harbouring dolphins, turtles, fish, invertebrates, sea birds and seaweeds along with threatened species such as Gould's petrel, little tern, grey nurse sharks and green turtles. Humpback whales also pass on their annual migration along the coast. Meanwhile, Tomaree National Park to the south contains a wide variety of flora habitats from coastal headlands to volcanic peaks and sub-coastal swamps, with a high density of native species, several of which are threatened.

"It's important to preserve our natural environment."

"It's good to have WSUD in place."

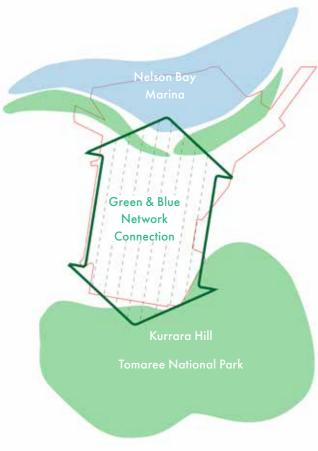
Stakeholder / Community Comments



PRESERVE & CELEBRATE NATURAL ENVIRONMENT OPPORTUNITIES & RESPONSE

It is important to preserve and celebrate the existing natural environment through:

- Connecting the waterfront with vegetated hilly backdrop through the urban fabric both visually and physically;
- Enhancing the Green Network, e.g. street tree planting, through the Town Centre;
- Implementing a Blue Network, i.e. storm water management via Water Sensitive Urban Design (WSUD) between the Town Centre and the Foreshore.



4.2 Understanding Pedestrian & Cycle Movement

EXISTING CONNECTIVITY ISSUES

Nelson Bay is currently heavily car dependant. Existing pedestrian and cycle movements are either disconnected or discouraged by a poor user environment.

- High volume by-pass traffic along Victoria Parade/ Government Road forms a pedestrian barrier between the Town Centre and the Foreshore.
- Traffic congestion happens at high pedestrian-volume areas, such as Magnus Street and the north end of Stockton Street, particularly during the peak tourist season. This is caused by limited and constrained street connections between the Town Centre and the Foreshore.
- Lack of alternative transit modes, such as public transport and cycle facilities. Public transport services and facilities are poor quality and limited.
- Disconnected footpath and cycle path around Town Centre and Foreshore area.

- Lack of disabled access, especially approaching the Foreshore area where the ground level changes.
- Laneways in the Town Centre are either in poor condition or feel unsafe for people to use.
- Lack of wayfinding signage, especially at key nodes and arrival points.

"Remove overhead bridge [on Victoria Parade] & Stockton Stage" "Really like Stockton St being a Lack of Disabled 'Boulevard'." Access Traffic Barrier Traffic Congestions Area Existing Dull Laneway Existing Bus Stop requiring upgrade

OPPORTUNITIES & RESPONSE

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- •

IMPROVE CONNECTIVITY & WALKABILITY

- The environment needs to be pedestrian and cycle friendly. Safe, weatherprotected and well conncected linkages will promote and improve non-vehicular movement both at the Town Centre and the Foreshore. A few responses include:
 - Prioritising pedestrians in the Town Centre Core and diverting traffic movements;
 - Allowing for slow-medium speed traffic in the Town Centre;
 - Marginalising fast traffic to the Town Centre periphery;
 - Improving public transport and cycle facilities;
 - Providing universally accessible environment for people
 - of all ages and different needs and interests;
- Encourage revitalising of laneways to improve Town Centre permeability;
 - Providing clear and legible wayfinding signage.



Pedestrian-priority Town Centre Core

Pedestrian Prioritised Town Centre Slow Traffic Zone (10-25kmph)

Pedestrian and Cycle Friendly Local Area Medium Traffic Zone (40kmph)

Peripheral/By-Pass Traffic Zone (50+kmph)

4.3 Understanding Place Character

EXISTING CHARM

Situated among a stunning natural setting, Nelson Bay has evolved from a fishing village into a popular coastal holiday destination and lifestyle town with a relaxed character.

At the Foreshore, it features:

- A large marina, particularly a busy working marian for fishing industry at western foreshore;
- Waterfront walkways and beaches;
- Restaurants and cafés specialising in fresh local produce and seafood;
- Green foreshore parklands;
- Water-based tourism activities and facilities;
- Heritage items, such the ANZAC war memorial.

At the Town Centre, it features:

- Magnus Street with a village character, offering boutique shops and restaurants/cafés, where people love to eat, drink, linger and mingle;
- Stockton Street as the main axis, providing direct connection to the Foreshore.

EXISTING ISSUES

There are a large number of open air car parks dispersedly located along the Foreshore which dominate, constraining tourist activity and public domain opportunities at the waterfront.

Also Nelson Bay Town Centre currently lacks night-time activation and activities. The Foreshore hosts the Sacred Tree markets, however this is limited to the peak summer season.

"Move Info Centre & have building as Art Gallery."

"Consider multi-level parking in conjunction with other commercial functions e.g. educational facility."

Stakeholder / Community Comment



Foreshore Promenade



Village Character on Magnus Street



Foreshore On Grade Car Park



Apex Park

Sacred Tree Markets at the foreshore

Source: Visit NSW

ENHANCE & ENLIVEN CHARACTER OPPORTUNITIES & RESPONSE

To further enhance and enliven the existing local charm and place character, there are opportunities, such as:

- Advocating Western Foreshore as a working marina while keeping Eastern Foreshore focused on recreational functions;
- Freeing up more foreshore open space for tourism, public recreation and event opportunities by relocating foreshore parking to nearby Town Centre multi-level facilities if available;
- Promoting Stockton Street into a pedestrian boulevard with a special focus at its northern end;
- Enhancing the village character at Magnus Street and Stockton Street Village Precinct via upgraded streetscape;
- Considering a year-round calendar of events, as well as the activation of streets in the evenings, such as bar and restaurant offerings, which boost the local economy and attract both tourists and permanent residents to the Bay.



5. Strategic Direction.

Three "Big Moves" underpin the vision for Nelson Bay Town Centre and Foreshore:

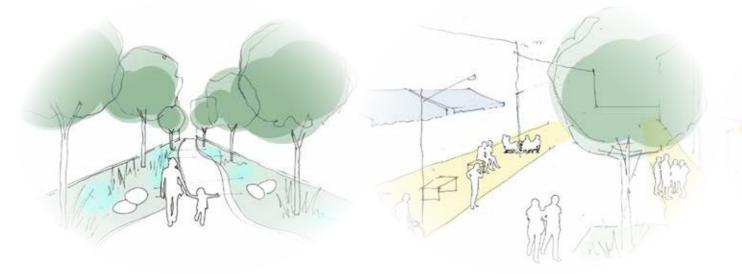
- Green & Blue Network
- Streets for People
- Places for People



Three Big Moves 5.1

These are the strategic design directions for the public domain, developed from our understanding of the existing natural environment, connectivity and place character.

Any future improvements to the public domain to achieve the vision for Nelson Bay should be underpinned by these Big Moves.



GREEN & BLUE NETWORK

Provide an integrated green and blue network connecting Nelson Bay to Tomaree National Park, that will reduce environmental impacts, improve public health and contribute to a beautiful urban environment.

- Establish street tree canopies and under-storey planting that will reinforce hierarchy of the street network and improve the urban ecology.
- Integrate the management of storm water and Water ٠ Sensitive Urban Design into the design of upgraded streets and public open spaces.
- Interpretive water features and landmark public art, • which are ecologically sustainable, to create a more visually interesting and culturally diverse public domain.

STREETS FOR PEOPLE

Create pedestrian- and cycle-friendly street environments that are easily accessible for all users. Prioritise people, by creating a traffic environment where priority is given to pedestrian movement, cycling infrastructure and public activity.

- Ensure streets and intersections are designed for pedestrian priority.
- Reduce traffic speed & congestion in high pedestrian areas.
- Improve physical and visual access through safe, activated and well connected streets and laneways.
- Improve footpath amenity, such as upgraded street furniture, lighting and paving.
- Provide weather protection for pedestrians.
- Provide clear and informative wayfinding.



PLACES FOR PEOPLE

Offer places with a diverse range of year-round uses, high public amenity and distinct design quality, where the stories of Nelson Bay are represented and enhanced.

- Restore character of Town Centre and Foreshore with enhancement of existing charm, celebrating Indigenous and European heritage.
- Achieve desirable public open spaces with high level of amenity, addressing climate, safety, circulation, and activity.
- Provide a variety of spaces that are inclusive of particular needs and desires of different groups of people.
- Create an adaptable public domain, capable of accommodating a broad range of uses, events, experiences and public activities throughout different times of the day and year.

6. Design Strategies.

Each of the following public domain typologies and overlays, when coordinated, will provide the elements necessary to develop a consistent high quality public domain. An overarching Structure Plan is developed to underpin the "Three Big Moves" set in Chapter 5.

This Structure Plan is further broken down into a series of design strategies and overlays, including:

ENVIRONMENT & ECOLOGY OVERLAY

- Green Network Overlay
- Blue Network Overlay

CYCLE NETWORK

STREET TYPOLOGY

PUBLIC DOMAIN CHARACTER & MATERIALS

- Public Domain Furniture
- Hardscape Treatment
- Public Domain Lighting

EVENTS & ACTIVATION OVERLAY PUBLIC ART OVERLAY

PUBLIC ARI OVERLAT

PEDESTRIAN WAYFINDING OVERLAY

STREET LIGHTING

These public domain strategies and overlays support the "LARGE Vision Concept".



6.1 Structure Plan

	_	Study Boundary
	(_)	Gateway
	(18)	Signalised Intersection
		Foreshore Open Space/Apex Park
4-LC		Periphery Zone Road
	diame.	Medium Zone Roa <mark>d</mark>
		Town Centre Street (with Primary & Secondary Green/Blue Network Application)
	Шţ	Slow/Shared Zone Road (with Primary & Secondary Green/Blue Network Application)
		Street Frontage Activation
	'////////	Continuous Street Awnings
	P	Public Parking
	CID	Crown land - potential for additional parking to be investigated
	B	Public Transport
		Shared Cycle/Foot Path
	H	Separated Cycleway
		Laneway Connection
		Foreshore Promenade
	1	Stockton Street Shared Zone
	2	Apex Park
	3	Eastern Foreshore
	4	Central Foreshore Plaza
etailed provals	5	Western Foreshore

6.2 Environment & Ecology **Overlay – Green Network**

Streets can provide an interlinked green network, with planting and street trees offering a variety of benefits to the environment, people and places within the public realm, including:

- Conserving and enhancing biodiversity and increasing access to nature;
- Improving air quality and filtering pollutants;
- Providing canopy coverage for shade, encouraging pedestrian movement;
- Facilitating adaptation to climate extremes;
- Enhancing 'sense of place', providing distinctive destinations for visitors and residents;
- Providing a buffer between pedestrians and car movement; and
- Providing seasonal interest and natural beauty through foliage.

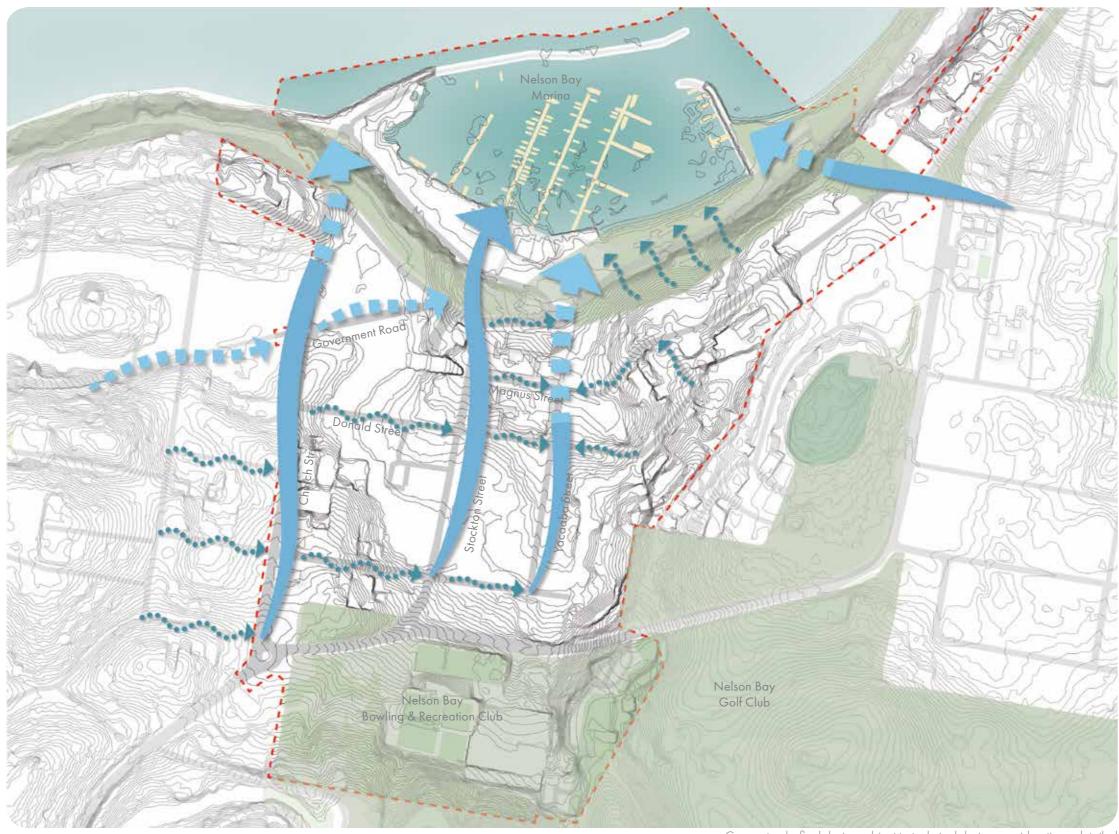
Primary and Secondary links reinforce street typology and character, and link the north-south axis from Tomaree National Park to the Bay. Tertiary links connect the local streets in an east-west axis, providing for a full network of green corridors.



Study Boundary _ _ _ _ _ _ _ _ _ _ _ _ _



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LEGEND

Study Boundary Primary Blue Connections Secondary Blue Connections Tertiary Blue Connections Concept only, final design subject to technical design considerations, detailed investigation of services and relevant approvals

6.3 Environment & Ecology Overlay — Blue Network

A blue network works in conjunction with the green network, with Water Sensitive Urban Design (WSUD) practices, to bring a variety of benefits, including:

- Minimising impervious surfaces to mitigate changes to the water balance;
- Reducing overland storm water runoff by providing temporary rainfall storage and re-use along streets;
- Protecting the sensitive marine environs by filtering pollution out of storm water, including litter, heavy metals and hydrocarbons (oil and grease);
- Supporting wildlife habitats and increasing biodiversity; and
- Contributing to the distinctive character and amenity of streets.

The primary blue connections play the major role of collecting the storm water from the secondary and tertiary blue connections, filtering it before it runs off into the natural system.

6.4 Street Typology

Streets are the fundamental elements of the public domain.

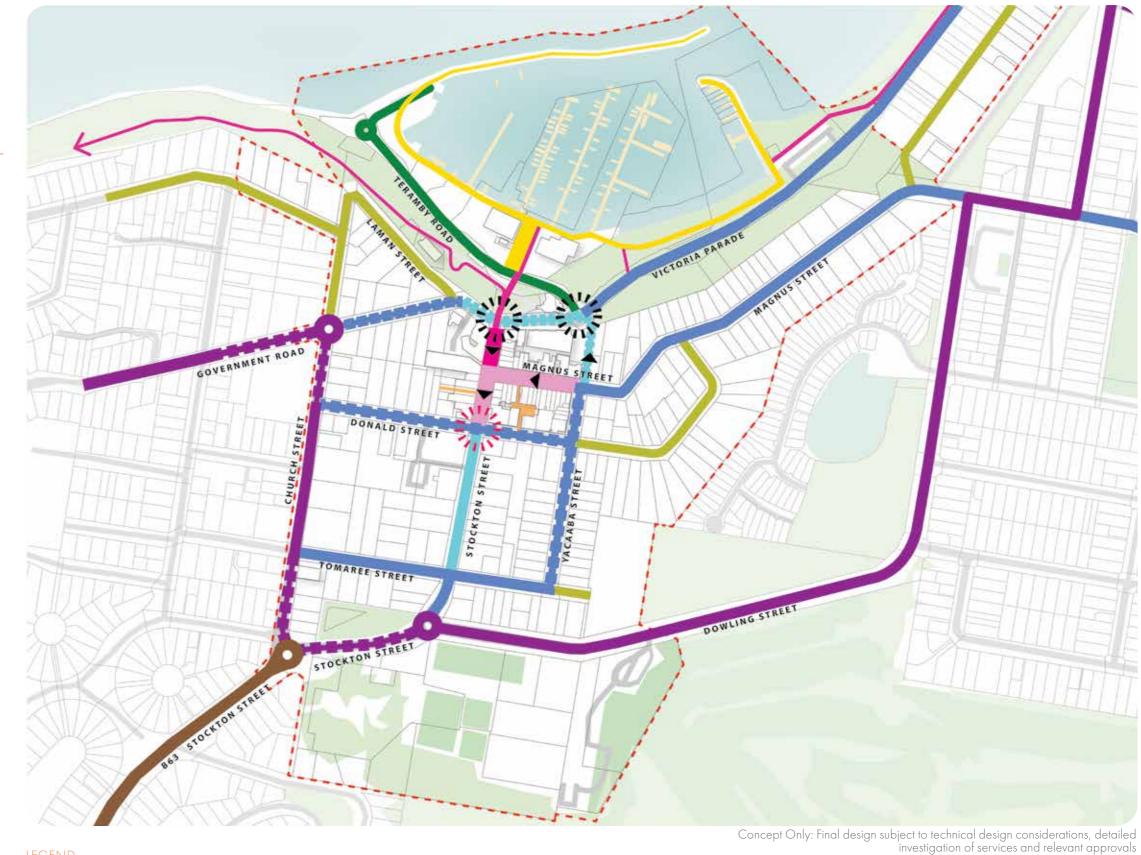
They are critical to the liveability and sustainability of the urban environment and are important places for people to meet and socialise. Street typology must clearly reflect the street hierarchy and define the character.

PEDESTRIAN ZONE

Pedestrian Shared Zone: Level street treatment, one-way vehicle movement with capacity to close to vehicles dedicated to pedestrian movement from Town Centre to Foreshore, with varied hardscape and ecological corridor Pedestrian/Cycle Shared Path: finishes to be upgraded where necessary to integrate with Foreshore Foreshore Promenade: Dedicated pedestrian zone, 1 incorporates shared path along eastern section Laneways: encourage activation SLOW ZONE (10-25KMPH) Village Boulevard: Shared zone with level 1 treatment for road and footpath, giving priority to pedestrians and allowing for closure for events Pedestrian Priority Boulevard: Pedestrian priority to maximise 2 📥 permeability - into Town Centre and to Foreshore MEDIUM ZONE (40KMPH) Foreshore Service Road 3 Pedestrian Priority Road Collector Road - Town Centre Treatment 2 PERIPHERAL ZONE (50+KMPH) Collector Road З Sub-Arterial Road - By-Pass: Re-routed from the waterfront to allow for traffic to by-pass the Town Centre, reducing vehicular movements and thereby increasing pedestrian connectivity Sub-Arterial Road - Gateway Treatment Arterial Road Local Street

Quality of Finishes Level

1 = Highest treatment quality for key public space 5 = Lowest treatment quality for public space



Study Boundary _____



Signalised Intersection

Intersection of Donald St & Stockton St - options include: - Installation of traffic lights - Extended shared zone - Relocation of one or both crossings and construction of kerb extensions

One-way - Proposed direction



Study Boundary

Signalised Intersection

Intersection of Donald St & Stockton St - options include: - Installation of traffic lights - Extended shared zone - Relocation of one or both crossings and construction of kerb extensions

One-way - Proposed direction

6.5 Cycle Network

Cycling, as a recreational activity and an alternative transit mode, is a low-cost, sustainable and healthy way to travel

In order to facilitate a cycle friendly environment, it is important to improve the cycle network with safer and better connected paths, which are designed to minimise conflicts with pedestrians and vehicles.



6.6 Public Domain Character & Materials

FORESHORE

The Foreshore celebrates the prime waterfront location of the Town with high-quality materials and elements that enhance the colours and textures of the natural environment of the Marina.



Quality of Finishes Level 1: high-quality paving and some bespoke elements/ foreshore lighting

PEDESTRIAN ZONE + SLOW ZONE (10-25KMPH)

The Town Centre accommodates and prioritises pedestrians, with high-quality, distinctive, contemporary features which reflect the NEXT Nelson Bay.



Quality of Finishes Level 1: high-quality paving and special integrated seating/feature lighting

Public Domain Furniture



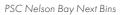


Seating with Integrated Planting



Seating with Integrated Planting







PSC Nelson Bay Next Bins







Hardscape Elements

Lights By The Bay



Sandstone Elements



Stone Paving Setts



Urban Furniture for Streets - Bollards

Public Domain Lighting





Pedestrian Scale Lighting

Integrated Lighting





Opportunity for installations of feature lighting/integrated with public art



Smart Pole Lighting



Pedestrian Scale Lighting

Public Domain Furniture

Hardscape Elements

Street Lighting





PSC Nelson Bay Next Bins



Timber furniture





Bus Stops





Precast Concrete Paving

Bike Racks

PSC Nelson Bay Next Bins



Insitu Concrete Paving







Smart Pole Lighting



MEDIUM ZONE (40KMPH)

Areas surrounding the Town Centre will reflect a similar language of contemporary design features, and a consistent palette of upgraded elements.



Quality of Finishes Level 2-3: medium-quality paving, durable stainless steel street furniture

PERIPHERAL ZONE (50+KMPH)

Peripheral areas surrounding the Town Centre will also have a consistent palette of upgraded elements of street furniture and lighting where necessary.



6.7 Events & Activation Overlay

Regular community events and activation of the public domain provide social and economic benefits, supporting the local economy and contributing to the identity of place and community.

These should be programmed to activate the Town Centre and support local businesses throughout the year, with a variety of events that enliven public spaces during the day and evenings.

EVENT AREAS & ROLE/FUNCTIONS

Apex Park: Existing ANZAC and Remembrance Day services, as well as other festival and market events

Stockton Street: Proposed shared zone in heart of CBD gives opportunity for everyday/weekend popup activities and events that incorporate and celebrate local businesses and encourage late night activation

Magnus Street, Village Precinct: Proposed shared zone with level street treatment and potential for closure for year-round weekly or monthly market events and other pop-up activities such as Food and Wine Festivals

Yacaaba Street: Infrastructure for events (water, power, lighting) was added in the recent Yacaaba St Extension

Foreshore Central Plaza: Existing sculpture festival and other events, potential to link with Stockton St to reinforce connection from Marina to Town Centre

Eastern Foreshore: Focus on recreational activities and facilities for all ages, potential for educational programme/ events, such as a wide range of educational programs that are designed and offered by Port Stephens Council to increase environmental awareness for the community



----- Study Boundary

investigation of services and relevant approvals



----- Study Boundary

6.8 Public Art Overlay

Public art provides the opportunity to interpret the Town's rich history and look to the future whilst shaping our collective consciousness, creating inspiring, welcoming places.

It is essential that public art is programmed and located correctly, and is reflective of history and place, whilst also providing for ownership by the local community. It should be location specific and integrated with street lighting and signage.

A community-led procurement and design process will give opportunities to celebrate local artists. Port Stephens Cultural Plan recognises the importance of prioritising and integrating such cultural infrastructure.

PUBLIC ART LOCATIONS

Gateway Park: Opportunity for art work to form landmark entrance to Nelson Bay, celebrating the culture and history of the town. Gateway Art to boast boldly and to be visible from distance

Stockton Street & Magnus Street: Linear art work to reinforce identity of Stockton Street as heart of Town Centre and celebrate views and proximity to Bay. Magnus Street artworks to be inkeeping with 'Village Precinct' designation, celebrating history and character of Town

Apex Park: Art work to reinforce transition between Town Centre and Foreshore. Potential opportunity to highlight ANZAC memorial and eastern axis

Foreshore Central Plaza: Gateway artwork to celebrate arrival at Nelson Bay Foreshore and link back to Apex Park and Stockton Street

Existing Artworks: Whale tails trail

Eastern Foreshore: Opportunity for artwork to celebrate activities and unique marine environment along Foreshore and at Ferry location

Western Foreshore: Opportunity for artwork to celebrate Nelson Bay's fishing and maritime heritage

6.9 Pedestrian Wayfinding Overlay

An intuitive wayfinding system allows the delivery of a more legible public domain that encourages people to walk with comfort and confidence around Nelson Bay Town Centre and Foreshore and beyond.

Clear wayfinding will allow people to reach their destination easily and quickly by providing the cues and information to know: where you are, where you are headed, how to get there, and how long it will take.

Information, mapping and pedestrian direction signs together form a pedestrian wayfinding network throughout the Town Centre and the Foreshore.

The wayfinding system will be as inclusive as possible by providing information in formats accessible to mobility impaired, visually impaired and hearing impaired users.

PEDESTRIAN WAYFINDING NETWORK

- Pedestrian Route throughout the Town Centre and Foreshore, along which wayfinding signs are provided for connected navigation
- Informal Foreshore Walking and Cycle Track, linking Nelson Bay and beyond
- Laneways and Through-Site Links within Town Centre . . . improve site walkability and permeability. Direction signs at each end of the laneways/through site links are necessary to highlight destinations.
 - Public Car Parks will be heavily used during the peak season. Directions are especially important for visitors and tourists.

Information and Mapping Signs are located at the entry points of the central gathering areas, e.g. the Town Centre Village Precinct, Apex Park, the Foreshore central plaza and the ferry wharf, where people tend to stop, read, understand and make decisions for travel.

Pedestrian Directional Signs are located at:

- Areas with change of direction, e.g. street intersections;
- Car Park entry/exits;

P

- End of laneways/through-site links;
- Mid-point of long routes.
- Proposed Public Amenities



----- Study Boundary

investigation of services and relevant approvals



legend

Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals

----- Study Boundary

6.10 Street Lighting

Street lighting works in conjunction with other street elements as an organising factor to establish the hierarchy of the streetscape.

Lighting design also contributes to public domain character and safety. Nelson Bay public domain lighting strategy specifies four overall treatments, which are serving four different character areas and purposes. Upgrading the lighting across the Town Centre provides an opportunity to integrate a consistent contemporary suite of products which employ sustainable low-energy technology and modular adaption for future flexibility.

LIGHTING TYPES

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Stockton Street Shared Zone lighting will celebrate an active and bustling Town Centre heart, with increased hours of activation year-round. A range of street lighting will be incorporated, including playful feature lights and lighting of public art & wayfinding

Village Precinct lighting at Magnus Street and Stockton Street shared zone and laneways will reflect the 'village' character. Smaller, pedestrian-scale street poles will support the finer grain of the streetscape

Town Centre street lighting will be upgraded with increased frequency and contemporary design to improve pedestrian amenity and safety. Smart poles will provide a modular system for future flexibility and upgrade.

Foreshore Lighting will reinforce connection to the Town Centre through Apex Park, whilst also celebrating the special character of the waterfront promenade. This will include pedestrian-scale lighting elements and lighting integrated into the promenade environment, such as timber handrails or sleepers.

7. Key Places & Spaces.

Four key places have been identified and considered in further detail in order to guide the delivery of the overarching vision. These places will reflect the nature of Nelson Bay as a Peninsula gateway, waterfront destination, and bustling Town Centre.





Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals

7.1 Key Places Overview

LEGEND 1 Stockton Street Shared Zone & Magnus Street Village Precinct 2 Apex Park & Victoria Parade Interface 3 Eastern Foreshore 4 Nelson Bay Gateways

7.2 Stockton Street Shared Zone & Magnus Street Village Precinct

The northern portion of Stockton Street is reinforced as the heart of the Town Centre, activated by boutique retail and cafes, with space to spill out onto a pedestrian priority low-speed shared environment.

Pedestrian priority is achieved here with a level street threshold, and a slow shared zone between, pedestrians, cyclists and vehicles, with respective priority. This allows for a connected, walk-able street, with activities spilling from cafés and the potential opportunity to close the street for certain pop-up events, such as village markets. Full pedestrianisation of the northern portion of Stockton Street is considered a long-term vision.

This northern portion is celebrated with a planting and paving design which celebrates the connection with the Foreshore, as well as public art opportunities to create a unique, memorable place.

Pedestrian wayfinding reinforces the more seamless connection through to Apex Park and the Foreshore, which is enhanced by upgraded landscaping.

Complementing and connecting with the wide shared zone on Stockton Street, Magnus Street in contrast is to have a finer-grain and proportion.

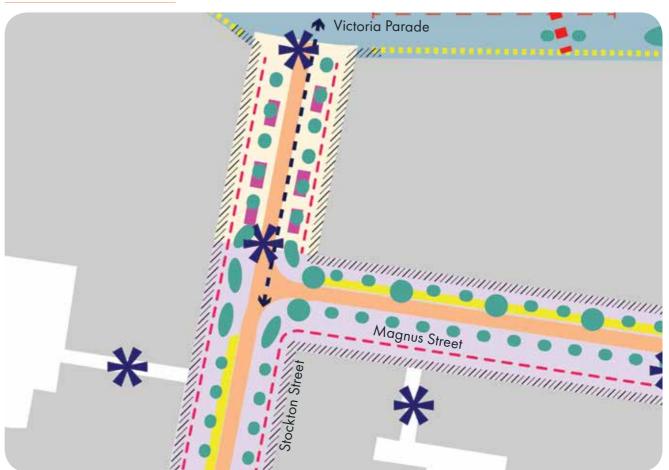
Finer-grain retail and cafés have the ability to spill out onto the wider southern side of Magnus Street, taking advantage of the northern aspect. Parallel parking will only be available along northern side of Magnus Street. However the removal of the southern side street parking will depend on the availability of a commensurate number of additional car spaces in the town centre.

Note: Shared zone design would be subject to further detailed investigation in relation to drainage and stormwater design

	Shared Zone with Pedestrian Mall Capacity
	Shared Zone
	Feature Planting
• • •	Street Tree Planting
<>	Key Axis of Pedestrian Flow
	Street Furniture Zone
	Vehicle Zone
	Street Parking
*	Public Art Opportunity
	Outdoor Seating Zone
'//////	Continuous Street Awning (to be built in to DA requirements)



FUNCTION DIAGRAM



Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals







Source: Wikimedia

KEY PLAN



KEY SPACES

:0:

Stockton Street Shared Zone

- Shared Zone with capacity to close as a Pedestrian Mall
- Feature planting
- Variety of seating with integrated planting
- Smart pole street lighting & feature lighting
- New public domain elements to include fountains, bike racks, bins, cafe umbrellas
- Wayfinding signage

[2] Magnus Street Village Precinct

- Fine-grain stone paving sets, with level threshold creating shared zone
- Slow-speed environment, one-way west
- Parallel parking along northern side with new feature Palm planting
- 9m wide footpath along southern side for outdoor dining, with new tree planting & garden beds
- New street and pedestrian lights
- New public domain elements



Signalised Scramble Crossing

Donald St & Stockton St Intersection options to be investigated:

- Signalised Intersection - Extended shared zone

- Relocation of one or both crossings and construction of kerb extensions



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STREET PERSPECTIVE [View 01]: Stockton Street Shared Zone

Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals



STREET PERSPECTIVE [View 02]: Magnus Street Shared Zone

Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals

7.3 Apex Park & Victoria Parade Interface

A key identified aim is to better connect the Town Centre with the Foreshore. The treatment of Victoria Parade, and its connection with Stockton Street and Apex Park, is crucial to encourage walkability and improve connection.

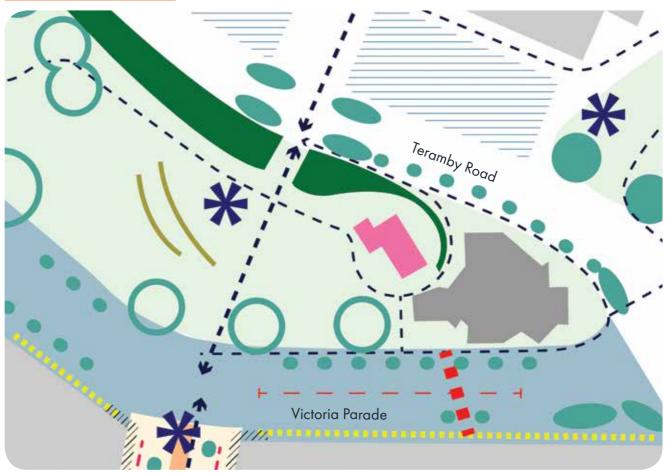
Cafés have the opportunity to spill onto the southern side of Victoria Parade, which is to be enhanced as an attractive, walk-able street with increased planting and drop-off zones provided at street frontages. A section of Victoria Parade is categorised as a slow (25kmph) Pedestrian Priority Boulevard, with signalised scramble crossings at the end of Stockton St and Yacaaba St.

Removal of the existing Skybridge and median creates a more generous pedestrian environment around the existing Information Centre, which is proposed to be transformed into a community facility, with café and upgraded public toilets.

This Plan is largely in-keeping with the 2015 Apex Park masterplan, which is extended to include the currently underutilised car parking space to the north east of Teramby Road. The ANZAC war memorial is retained and enhanced, with eastern facing seating and upgraded landscaping. Wayfinding and historical interpretation signage is to be provided throughout the Park.

	Apex Park Open Space
	Pedestrian Priority Boulevard (Slow Zone 25kmph)
	Cafe & Gallery Space converted from Existing Information Centre
	ANZAC Memorial
	Steep Bank
//////	Foreshore On-Grade Parking
\bigcirc	Existing Trees
	Feature Planting
• • •	Street Tree Planting
$\langle \rangle$	Key Connection
	Street Furniture Zone
*	Potential Public Art Location
•••	Removal of the Existing Skybridge
⊢ ⊣	Removal of the Existing Median
	Street Frontage Activation with increased planting and drop-off zones

FUNCTION DIAGRAM



Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals









KEY PLAN



KEY SPACES

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Victoria Parade

- Pedestrian-priority boulevard to encourage pedestrian movement, with reduced traffic speed and new cycleway on northern edge.
- Revitalise footpaths with new tree planting and street furniture elements
- Remove existing Skybridge and central concrete median
- Drop-off zone on southern edge of Victoria Parade

Apex Park

Design generally aligns with Apex Park Masterplan 2015. Reinforce existing park planting with new feature planting to enhance the green connections to Foreshore

- Widened upgraded footpath and stairs
- Sandstone terraced seating
- Existing Visitor Centre building to be refurbished with public toilet upgrades and new cafe
- Reinstate existing embankment with new low shrub and ground cover planting to prevent erosion
- Narrow Teramby Road to slow traffic and improve pedestrian footpaths
- Increase tree planting at the edges of the existing car park to provide separation between the foreshore building and parking, as well as to form the entry plaza to the foreshore
- Existing foreshore parking to remain
- Reduced foreshore parking (relies on availability of • additional public parking in other locations)



Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals



STREET PERSPECTIVE [View 03]: Victoria Parade Interface Between Town Centre and Foreshore

Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals



OPEN SPACE PERSPECTIVE [View 04]: Eastern Foreshore Playground & Recreation Zone

Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals

7.4 Eastern Foreshore

Apex Park is the defining major public space within the Nelson Bay Town Centre and Foreshore, however it is relatively constrained due to its topography and existing features. The Western Foreshore contains working elements of an existing boat yard, and whilst we propose better walkability through this area, it is understood that car parking and marina functions are essential to its function as an active boat yard and fishing marina.

The Eastern Foreshore area, which extends from the intersection of Victoria Parade and Teramby Road to the ferry wharf, is a popular waterfront destination including a children's play park and a linear reserve. It also contains a large amount of car parking. Should additional car parking capacity become available in other locations in Nelson Bay, there is potential for utilisation as public open space.

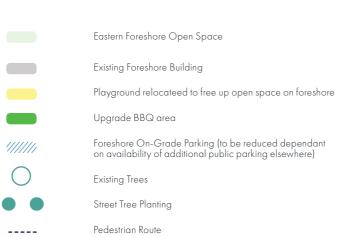
A series of improvements in this area is proposed to create a memorable waterfront destination with a varied programme of activities that will attract residents and visitors of all ages.

Some detailed proposals include:

• reducing the existing car park in size. However the removal of the car parking will depend on the availability of a commensurate number of additional car spaces in the town centre.

• creating new foreshore park by providing facilities / attractions suitable for all ages, such as half basketball court, shared shaded zone for recreational and educational uses and new BBQ and amenities block.

We propose this Foreshore area to be exemplary in its approach to protecting and conserving the marine ecology, and educating users and visitors to the issues affecting the Bay, and the role that their public domain plays in addressing these issues. This might include public artworks and educational displays, as well as celebrating Water Sensitive Urban Design (WSUD) features.



Potential Public Art Location

*

Teramby Road

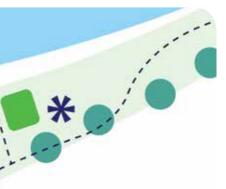


Victoria Porade

FUNCTION DIAGRAM

Nelson Bay Marina

*



Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals



KEY PLAN





KEY SPACES

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Waterfront Promenade East

- Reduce existing foreshore parking and change parking entry/exit to Victoria Parade (relies on availability of additional public parking in other locations becoming available)
- Playground relocated to provide more open space along foreshore
- Retain existing trees along Foreshore
- Upgrade & expand existing playground with new equipment & shade canopies
- Upgrade BBQ shelter, BBQ amenities and install new picnic settings along Foreshore reserve
- New feature Araucaria planting
 along Victoria Parade
- Upgrade shared path to reinforce pedestrian connections along Foreshore
- New planting to existing gathering area to reinforce the meeting point for tour groups
- Consolidate car park entries

Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals

7.5 Nelson Bay Gateways

NELSON BAY GATEWAY PARK

This reserve will provide an iconic gateway into Nelson Bay, celebrating the unique character and history of the Town, with public art, lighting and tree planting celebrating the arrival to the Town by the Bay.

The gateway can be either a public art element or a signage element or an integration of both. It is a great opportunity for the local artists' involvement.

This gateway park will provide clear wayfinding to delineate the direction to the Town Centre and to the by-pass continuing along Dowling Street to Shoal Bay and Fingal Bay.

CHURCH STREET & GOVERNMENT ROAD INTERSECTION

This intersection serves as a secondary Gateway into Nelson Bay.

People approaches Nelson Bay Foreshore and Town Centre via this threshold mostly have gained their knowledge of direction once passed the primary Gateway Park.

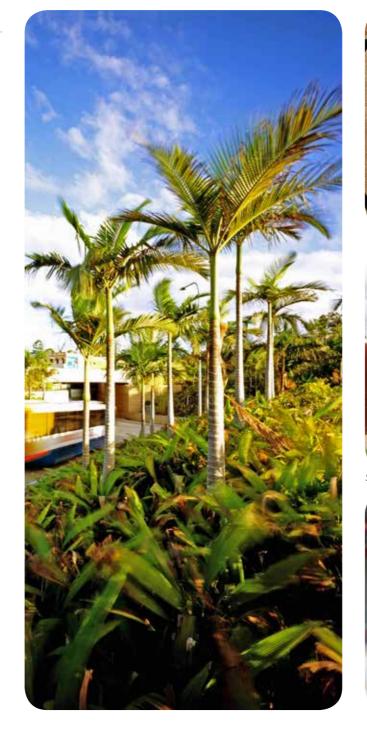
There is limited public land to introduce a gateway statement and relatively understated but friendly wayfinding strategies are proposed in this area.

KEY SPACES

Nelson Bay Gateway Park

0	Lighting and wayfinding on roundabout to be upgraded to signify entry to Nelson Bay
2	New interpretive public art/signage to celebrate arrival along Stockton St
3	Existing trees retained
3 4	New street trees and central median planting along Stockton St as part of arrival route
5	New street tree planting along Church St
6	Consider improved pedestrian crossings at this intersection to link public car park with Town Centre via Stockton St
	Church Street & Government Road Intersection
1	Options to increase pedestrian connectivity and safety to be explored
2	
2	and safety to be explored Gateway Palm planting, as a low-key gateway
-	and safety to be explored Gateway Palm planting, as a low-key gateway statement, at four corners of this intersection

New street tree planting along Church St











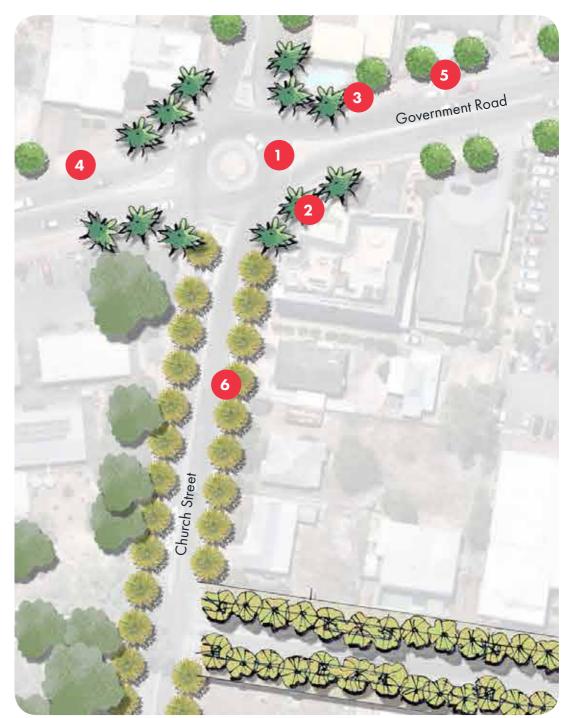
KEY PLAN









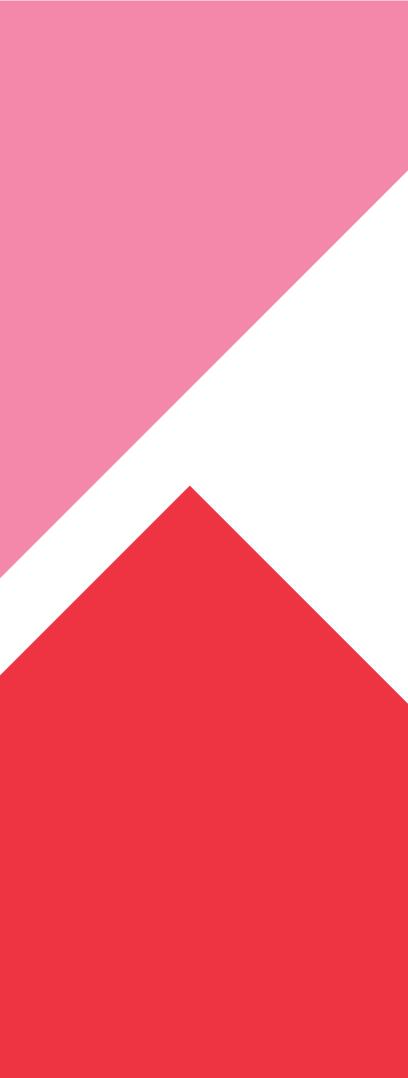


Nelson Bay Gateway Park

Church Street & Government Road Intersection Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals

8. Implementation.

Whilst this Plan has developed a long-term vision for Nelson Bay's public domain, we have considered a staged approach to implementation, with Small, Medium and Large moves.





BASE CONCEPT



8.1 Staging Approach

BALANCED CONCEPT

We understand that in some areas of the public domain, a staged incremental approach may be necessary. It allows for practical and effective steps to be taken in the immediate short-term, with restructuring and long-term investment to achieve the vision.

Three levels and/or stages of design and development are proposed for Nelson Bay public domain, which are:

SMALL

Base Concept: practical actions, short-term investment, improvements and upgrades

MEDIUM

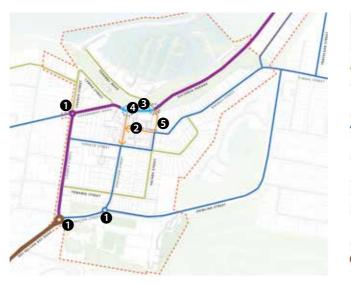
Balanced Concept: feasible actions, mid-term investment, value adds

LARGE

Vision Concept: bold actions, longerterm investment, re-structuring

This approach has been supported by Council and community stakeholders whilst developing the Plan, although support is for implementing the 'Vision' LARGE concept as soon as practicable.

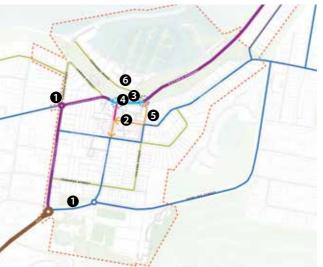
For the purpose of this Plan and its supporting documents, the focus is on developing the LARGE concept. However the SMALL, MEDIUM and LARGE steps are outlined indicatively in this section, with the detailed staging scopes elaborated and compared in the following section.



Gateway markers, i.e. wayfinding signage and feature tree planting, at key arrival intersections Remove Stockton Street Stage; Activate street frontages and increase pop-up activities in Village Precinct Connect Information Centre to the Foreshore and formalise perimeter footpath and connections to allow accessible pathways; Improve signage and lighting to assist visitor wayfinding

Apex Park interface: upgrade crossings at northern end of Stockton St and Yacaaba st to signalised scramble crossings

- Yacaaba Street Extension, is One-Way NORTH only, providing additional traffic access from the Town Centre to the Foreshore.
- Upgrade/complete existing missing footpath in Town Centre and Foreshore



- Create a Gateway park at the primary arrival point of Nelson Bay Road and Church Street intersection; Re-configure and upgrade streetscape along Stockton St and Government Rd
- Undertake public domain upgrades to Magnus Street & Stockton Street intersection threshold and the shared zone of Magnus Street and Stockton Street (section between Donald Street and Victoria Parade)
- Relocate Information Centre to centralised locations; Refurbishment of existing building for community use; Upgrade existing public amenities building;
- Apex Park interface: Remove Skybridge and widen footpath along Victoria Parade; Remove median barrier and upgrade footpath paving
- Yacaaba Street Extension remains as One-Way NORTH ONLY
- Design and implement new Foreshore Central Plaza between existing buildings to improve pedestrian circulation and visual connection to the water
- Undertake public domain upgrades to the Town Centre including consistent pavement, treatment, installation of street furniture and street tree planting; Underground existing overhead power-lines in the Town Centre

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VISION CONCEPT

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0	Design and implement art signage/gateway installation to Gateway Park
0	North end of Stockton Street revitalised into a Shared Zone, with potential to close off as Pedestrian Mall (Town Square)
8	Apex Park: Implement Apex Park Masterplan 2015
4	Apex Park interface: Implement 25kmph slow zone as a pedestrian prioritised boulevard on Victoria Parade between Yacaaba and Laman Street; Implement separated cycleway and widen footpaths along Victoria Parade
0	Design and implement new waterfront promenade connecting the Foreshore Central Plaza to the working marina
0	Reduce existing car park in size to allow construction of a new Eastern Foreshore park (if additional parking available elsewhere)
0	Consider options for Stockton Street and Donald Street intersection to improve traffic flow and improve pedestrian connectivity and safety
8	Consider converting Yacaaba Street Ext. to One- Way SOUTHBOUND, if north Stockton Street closed to traffic;
0	Redirect by-pass traffic to periphery of Town Centre along Dowling Street allowing pedestrian priority in the Town Centre and along the Foreshore
0	Undertake public domain upgrades and apply WSUD in Town Centre and Foreshore

Signalised Intersection

Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals

8.2 Detailed Staging Scope

	Thine Traine				
	Order of Priority]	2	3	4
	Proposal / Location	Village Precinct: Magnus Street; Stockton & Magnus Threshold; & Stockton Street (Between Magnus Street & Donald Street)	Stockton Street (Between Victoria Parade & Magnus Street)	Apex Park	Victoria Parad (Between Yaca Street & Laman
	SMALL Base Concept	Remove Stockton Street Stage to remove bottleneck at intersection and open the view corridor between town centre and Apex Park; Activate street frontages; Increase pop-up activities; Potential for temporary improvements to vacant shops, i.e. use space/windows for tourist information	Activate street frontages; Increase pop-up activities; Potential for temporary improvements to vacant shops, i.e. use space/windows for tourist information	Investigate methods to assist in stabilising northern embankment by use of planting; Strengthen the 'green edge' along Teramby Road whilst maintaining view corridors to the water.	Signalised scrar crossing at Yaco Street Extension Convert existing Stockton Street signals to allow pedestrian scrar and widen cross
13	MEDIUM Balanced Concept	Re-align parking and kerb extensions along Magnus Street shared zone to slow traffic; Upgrade existing lighting to encourage night time use of the Village; Selective removal of trees; pruning and maintenance and improvement of existing trees	Upgrade existing lighting to encourage night time use of the Village; Selective removal of trees; pruning and maintenance and improvement of existing trees	Formalise perimeter footpath and connections to allow accessible pathways; Improve lighting and wayfinding; Replace existing retaining walls with sandstone walls; Detailed design of interpretive signage and public art as interpretive of cultural and natural heritage of Nelson Bay; Reinforce the significance of the Anzac Memorial	Remove Skybrid (pending structu assessment) and widen footpath Victoria Parade Remove mediar barrier and upg footpath paving install street tree feature tree plan
	LARGE Vision Concept	Design and implement the revitalisation of Magnus Street shared zone and threshold; Install feature lighting, bespoke furniture, stone paving, flush kerbs at Magnus and Stockton threshold, wayfinding, public art and new feature planting	Design and implement the revitalisation of north end of Stockton Street into a slow- speed Shared Zone, bespoke furniture and stone paving, wayfinding maps, public art, Incorporate feature tree planting which are sensitive to the visual links (i.e. tall trunks.) Consider closing off Stockton Street north to vehicular traffic and implement Pedestrian-only Mall;	Implement "east" facing sandstone terraces to strengthen visual and physical connections to Anzac Memorial and the foreshore park beyond; Provide greater "level paved area" to assist with ceremonial events within Apex Park; Consider implementation of Apex Masterplan	Reduce speed of Victoria Parade 25kmph betwee Yacaaba & Lan St; Slow traffic t "flip" priority to pedestrian move Implement a saf 3m wide separa cycleway to remove conflict pedestrians in A Park; Cycleway to connect with shared path alo Government Ro and the foresho promenade to the east.

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Time Frame

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ıde caaba an Street)

Visitor Information Centre

Stockton Street Pedestrian Boulevard

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ramble icaaba on; ng et traffic W ramble ossing;

Formalise perimeter footpath and connections to allow accessible pathways;

Improve signage and lighting to assist visitor wayfinding

Complete missing footpath connections to provide safe, consistent and comfortable connections to the town centre;

ridge ctural ind le an ograde

ng; ees and lanting

Refurbishment of existing building with new cafe. Upgrade th along existing public toilets; improve access and surveillance

> Investigate the relocation of the Visitor Information Centre to a location with parking available for caravans, campers & trailers. If relocated, consider active uses for the building to contribute to the public domain.

Improve pedestrian crossing amenities at Tomaree intersection;

Implement WSUD garden beds and street tree planting where possible to improve the green corridor connections

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along Detailed Design for total renovation of current brick building to allow for a new transparent building structure which ovements improves frontage and connection to Apex Park and Victoria Parade.

> Attract long term tenant i.e. cafe / restaurant to assist with the activation of Apex Park and surrounds whilst maintaining community use of "flexible floor space" within building

Underground existing overhead power lines;

Re-align parking and kerb extensions to complete public domain footpath upgrades;

Street tree planting and install new multifunction streetlights

-	-	-	-	-	-	-	-	-	-	-	-
acaaba Street Extension	8 Donald Street & intersection with Stockton Street	9 Primary Gateway Church Street/Nelson Bay Road Intersection		11 Secondary Gateway Teramby Road/ Victoria Parade Intersection:	12 Foreshore Central Plaza & Western Foreshore	13 Eastern Foreshore	14 Church Street	15 Laman Street	16 Teramby Road	17 Laneway off Stockton Street	18 Laneway linking off Magnus Street
acaaba Street xtension: as onstructed One- Vay NORTH affic movement; ncrease Tree lanting to adjoining edestrian shared rea to provide nore shade and <i>v</i> ind protection	Upgrade and complete missing footpath connections; Selective removal of trees; pruning and maintenance and improvement of existing trees condition	Install feature gateway planting and upgrade wayfinding signage at gateway	Install feature gateway planting and upgrade wayfinding signage at gateway	Install feature gateway planting and upgrade wayfinding signage at gateway	Removed existing clutter to plaza area directly adjacent to Teramby Road - including relocating waste bins, poster signage; Upgrade existing signage to D'Albora Marinas; Upgrade footpath paving and complete missing connections along Teramby Road	Upgrade/create a safe well lit pedestrian connection from the existing information centre to the eastern promenade adjacent existing car park; Linking Apex Park and the Ferry Wharf via the open spaces along eastern foreshore	Upgrade/complete existing missing footpath and install street trees where possible	Upgrade/ complete existing missing footpath	Upgrade/ complete existing missing footpath and provide new pedestrian lighting to increase safety and surveillance	Encourage activation and upgrades to laneways - subject to private funding	Encourage activation and upgrades to laneways - subject to private funding
		Create Gateway Park; Re-configure traffic lanes to allow inclusion of shared path; Underground overhead power lines; New verge planting, median treatments, new street lighting and banners	Re-configure and upgrade streetscape along Government Road to allow inclusion for shared path. Underground overhead power lines	Re-configure and upgrade streetscape along Victoria Parade to allow inclusion for shared path; Underground overhead power lines	new gateway plaza between exiting buildings to improve	and interpretative signage; Upgrade promenade lighting; Upgrade and expand	Re-configure and upgrade streetscape along Church Street to allow inclusion for shared path	Implement street tree planting or low / median shrub planting in verges to maintain views	Teramby Road works to align with Apex Park and Marina upgrades; Stabilistation of existing planting embankment	Encourage activation of laneways during the day and after hours with pop-up activities to draw locals and visitors into the town	Encourage activation of laneways during the day and after hours with pop-up activities to draw locals and visitors into the town
Consider edestrianising tockton Street north o traffic, and re- onfigure Yacaaba treet as One-Way OUTHBOUND; rovide suitable vayfinding signage o town centre arking areas	Consider options for Donald Street and Stockton Street intersection to improve traffic flow and improve pedestrian connectivity	Design and implement art signage / gateway installation to Gateway Park	Consider options for improving pedestrian connectivity and safety at Church Street and Government Road intersection	Signalised scramble crossing at Victoria Parade / Yacaaba intersection	Design and implement new waterfront promenade; connecting the new central plaza to the working docks at the CO-OP and existing breakwall; Consider cantilevered timber boardwalk where space is restricted and bridge over existing boat ramp (bridge to swing opwn when ramp is in use); Upgrade promenade paving and lighting; Implement the art trail /wayfinding	carpark in size to allow construction of a new foreshore park by providing facilities / attractions suitable for all ages including half basketball court and new BBQ /	Underground overhead powerlines and complete street tree planting; Install news streetlights		Formalisation of existing informal "goat track" access from Bridle Path to Teramby Road (timber steps)	activation of laneways	Provide short lease tenancies to allow activation of laneway. during high season; Encourage new small bars and wine bars

Appendix.

APPENDIX A	SITE ANALYSIS STUDY	48
APPENDIX B	COMMUNITY CONSULTATION WORKSHOP 1	52
APPENDIX C	COMMUNITY CONSULTATION WORKSHOP 2	54
APPENDIX D	STOCKTON STREET PEDESTRIAN MALL_ ALTERNATIVE CONCEPT	56

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PEDESTRIAN CONNECTIVITY

- Stockton Street features strongly as the northsouth axis across the Town Centre, providing pedestrians with direct physical and visual connection between the Town Centre and the Foreshore.
- The Yacaaba Street Extension, as an additional pedestrian and traffic link, has recently been constructed to increase accessibility from the Town Centre to the Foreshore. An opportunity exists to review its traffic arrangement so that the place character of Stockton Street as a central spine/ pedestrian boulevard can be further enhanced.
- A few existing laneways/through-site links within the Town Centre core area are identified. Activation of these can be encouraged to increase site permeability and to create safe, vibrant destinations for tourists and local residents.
- The promenade provides a great opportunity for • pedestrian access along the Foreshore, but could be improved and extended to increase connectivity.
- The existing Skybridge is currently under-utilised. Removing it provides an opportunity to free up more public space as well as to open up a better street view.

APPEALING LOCAL CHARACTER

The following Character Areas are identified in the Nelson Bay Town Centre and Foreshore Strategy 2012 and also within the DCP Section D 'Specific Areas'.

We see particular opportunities to enhance the public domain in:

- Existing Village Character on Magnus Street
- Foreshore area



Existing Foreshore Promenade



LEGEND



Bank - No pedestrian link



Existing Apex Park Along Existing Village Character Foreshore on Magnus Street

LEGEND



Village Precinct

Existing Village Character on Magnus Street

Green Link along Foreshore

Existing Active Frontage

GENEROUS OPEN SPACE, HERITAGE & COMMUNITY FACILITIES

- Apex Park, a significant public park located between the Town Centre and the Foreshore, is not currently able to provide a good connection between the two major functions. An opportunity exists to improve it into an attractive transition.
- Council owned public open space, which is located on the northern side of Stockton Street, near the round-about intersection of Nelson Bay Road and Church Street, has a potential to be transformed into a Gateway Park to provide a sense of arrival.
- Existing heritage items at Apex Park should be retained.
- Council owned Information Centre has potential to be either upgraded or relocated to the Town Centre.
- Existing community facilities (including public park, playground, community college, child-care) provide good community services for local residents, which is to be enhanced to attract future population growth.

Visitor Centre (to be refurbished)

Educational Facilities (Tomaree Community College)

Heritage/Historical Site

Post Office

Supermarket

Ferry Terminal

Place of Worship

Childcare/Pre-School

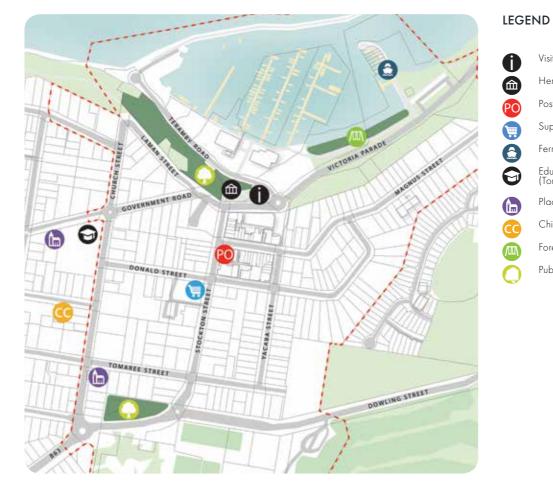
Foreshore Playground

Public Park

VEHICULAR CONNECTIVITY

- By-pass traffic along Victoria Parade forms a traffic barrier for pedestrians between Town Centre and the Foreshore.
- One-way traffic together with high volume of pedestrian movements on Magnus Street and north end of Stockton Street leads to significant traffic congestion, especially during peak periods. Cars circulating through the Town Centre looking for available parking or certain destinations further exacerbate the congestion.
- Yacaaba Street Extension provides additional traffic and pedestrian access from the Town Centre to the Foreshore. This one-way north access may help the traffic





Appendix A - Site Analysis Study

flow out of the Town Centre, however it also puts the traffic pressure back onto Victoria Parade and therefore aggravates it as a traffic barrier for pedestrians.

• Large number of open air car parks dispersedly located along Foreshore which constrains the activity/commercial opportunities at the waterfront. There is a opportunity to intensify the parking within the Town Centre so as to free up the waterfront spaces for tourism and commercial activities.



LEGEND

	Existing Arterial Road
	Existing Sub-Arterial Road
	Existing Traffic Barrier between Town Centre and Foreshore Existing Collector Road
_	Existing Local Street
\rightarrow	Existing One Way
>	Yacaaba St Extension (One Way North)
(P)	Public Car Park
[P]	Private Car Park
(P)	Private Underground CP
	Dedicated Street Parking

EXISTING TOPOGRAPHY

- Disconnection both visually and functionally between Town Centre and Foreshore
- Lack of disabled access to Waterfront via Apex Park due to existing topography/ level change

LIMITED CYCLE PATH & PUBLIC TRANSPORT

- Heavily car dependent, causing traffic congestion and parking issues during peak tourism time
- Poor public transport service
- Disconnected cycle path which discourage alternative transport modes, e.g. walking and cycling



LEGEND





Foreshore Cycle Route

Level Change -Disconnected Cycle Path

Bus Routes

Bus Interchange

EXISTING INFRASTRUCTURE SERVICES

- Overhead power lines restrain the opportunities for street tree planting
- Substation constraints at Apex Park

NIGHT-TIME ECONOMY

Currently, the Nelson Bay Town Centre lacks night-time activation and activities. We interpret this as a challenge which must be addressed to aid our vision for Nelson Bay to become a more attractive place for residents and visitors alike.



LEGEND

- Overhead full power lines
- Overhead communications or bunched power lines
 Apex Park sub-station



Sacred Tree Markets at the foreshore

Source: Visit NSW



Currently, the Foreshore hosts seasonal Sacred Tree markets during the summer season (top left), but we propose to consider a year-round calendar of events, as well as the activation of streets in the evenings, with some bar and restaurant offerings which boost the local economy and attract both tourists and permanent residents to the Bay.

Appendix B **Community Consultation Workshop 1**









Consultation with key stakeholders was carried out in May 2018, with Tract and Dot Dash presenting their initial findings and ideas or 'Key Moves' to various stakeholders.

This session proved to be invaluable to the design team, with positive feedback and comments to guide the next steps in developing the Plan.

Green, amber and red dots were provided, with only the 'positive' green dots being utilised by stakeholders to demonstrate their preferences - see green star locations on following page. All comments captured on sticky notes are also included overleaf.

SUMMARY

The community stakeholders overwhelmingly supported the 'L': Large Moves which presented visionary concepts for adapting the public realm.

Vision - Balanced - Base (Large - Medium - Small)

LARGE: Vision Concept Bold Moves - Long Term Investment - Re-structuring

MEDIUM: Balanced

Feasible Direction-Mid Term Investment - Value Add

SMALL: Base Concept

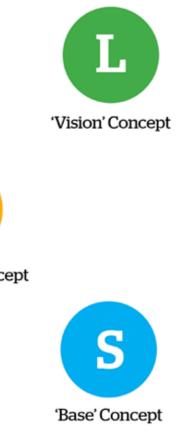
Practical Moves - Improvements and Upgrades

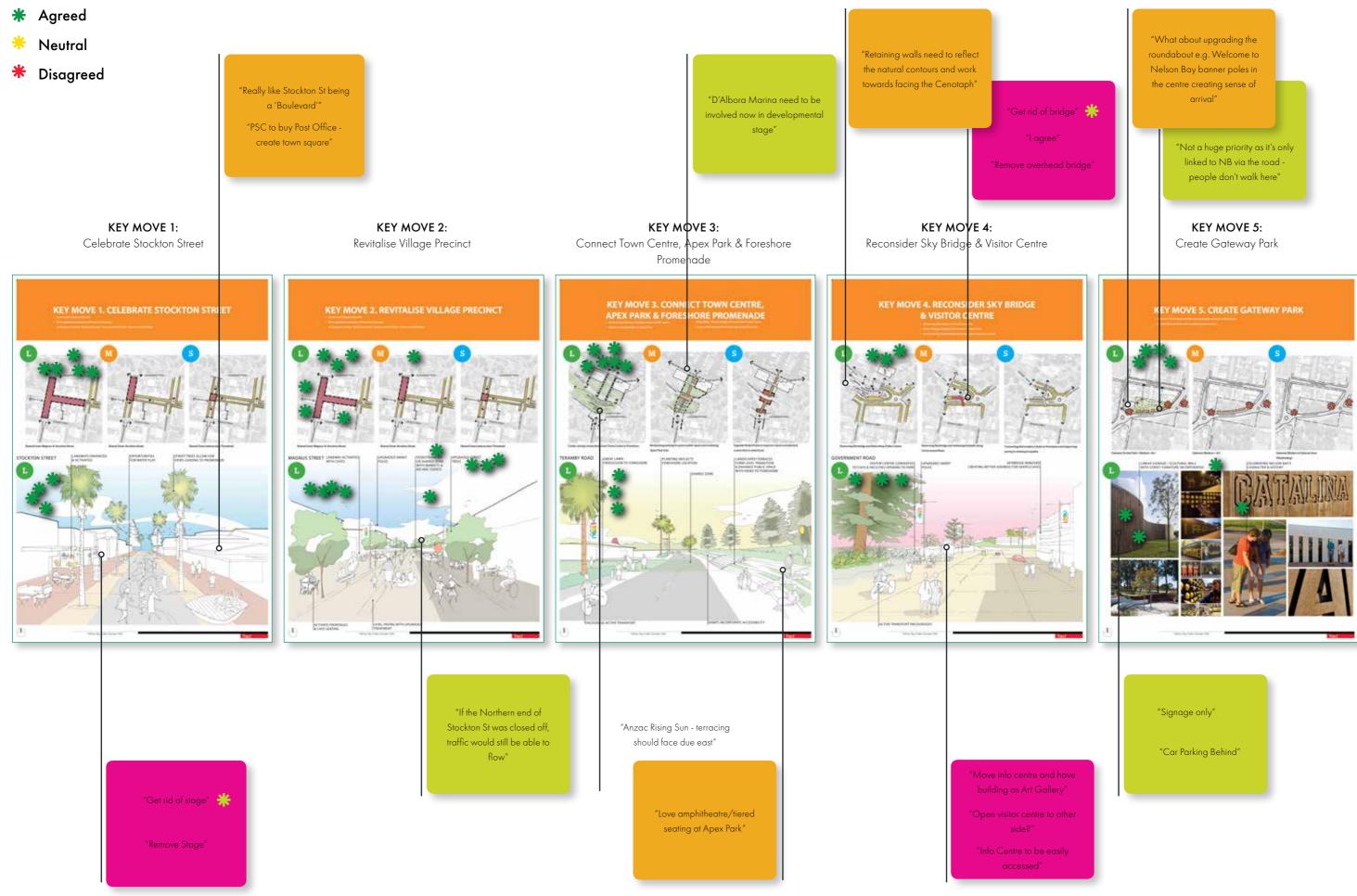






Many comments praised the removal of the Skybridge and the pedestrianisation of Stockton Street, as well as the adaption of the information centre and the landscaping of Apex Park.







The second consultation with the community representatives and the key stakeholders was carried out on 5th July 2018.

Tract Consultants presented their draft Nelson Bay Public Domain Plan and Streetscape Design Guidelines, as well as the draft Wayfinding and Signage Design on behalf of Dot Dash.

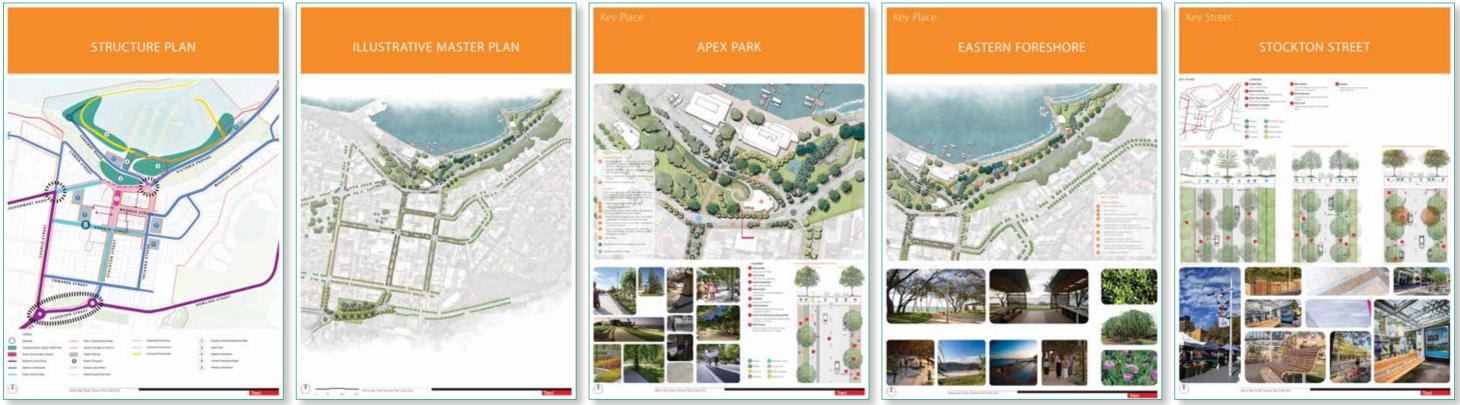
The community and key stakeholders were well informed on the draft design approaches and concepts proposed to the Nelson Bay Public Domain. An A4 feedback booklet was distributed to each individual at the end of the presentation for their comments. Seven A1 boards were also on display for the stakeholders' votes and comments.

All comments captured on the A4 booklets and A1 boards are to be provided separatly, with some key notes included overleaf.

SUMMARY

This session proved to be successful. The community stakeholders in general supported the draft Public Domain Plan.

Many comments praised the pedestrian friendly response and the proposals of the upgraded streetscape to the Town Centre and the Foreshore public domain. However, concerns of the traffic management and parking issues were also expressed.



Some detail comments on the tree planting, material and color selections and the wayfinding signage design were furthered communicated.



Appendix D Stockton Street Pedestrian Mall_ Alternative Concept

As a long-term vision, a bold concept is included for the closure of the northern portion of Stockton Street to vehicles, creating a Pedestrian Mall.

Rather than a street, this portion then becomes a town square. This treatment allows for a planting and paving design which celebrates the connection with the Foreshore, as well as public art and water play opportunities to create a unique, memorable place.

Stockton Street Pedestrian Mall

- Pedestrianised zone with bespoke stone paving & integrated public art
- Central Water Play Feature
- Feature Palm planting
- Variety of seating with integrated planting •
- Smart pole street lighting with feature lighting
- New public domain elements to include fountains, bike racks, bins, cafe umbrellas
- Wayfinding signage

STOCKTON STREET NORTHERN PORTION _ PEDESTRIAN MALL



Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals



Source: Wikimedia





STREET PERSPECTIVE [View 01]: Stockton Street Pedestrian Mall

Concept Only: Final design subject to technical design considerations, detailed investigation of services and relevant approvals







For more information please contact Development Services

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Nelson Bay Public Domain

Streetscape Design Guidelines

Prepared by Tract Consultants for Port Stephens Council

June 2019

portstephens.nsw.gov.au





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Supported by the



This project was funded by Port Stephens Council and the Australian Government, and administered on behalf of the NSW Government by the NSW Department of Industry.

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1. Introduction

From the hinterland to the pristine coast, Nelson Bay's natural environment and scenic beauty is cherished and admired by locals and visitors.

Protecting, enhancing and strengthening the natural environment of Nelson Bay is the quintessential principle for all future improvements in the Town Centre and beyond.



Port Stephens Council

Nelson Bay NEXT

Tract Consultants

1.1 Vision

Nelson Bay is a major tourism and service centre of Tomaree Peninsula within Port Stephens Local Government Area.

As the tourism industry continues to grow and place demands on the natural assets, urban facilities and transport infrastructure, Nelson Bay must rejuvenate its Town Centre and Foreshore to stay relevant for its future local community and visitors by providing well serviced, high quality streetscapes and amenities.

Nelson Bay will be a "one-of-a-kind" destination for both tourists and local residents, to live, work, play and stay. This design guideline seeks to provide necessary information to ensure the following principles are achieved:

Embrace Our Natural Environment: Continue to strive for a sustainable future and to ensure the natural ecosystems and biodiversity are valued, cared for, improved and conserved.

Foster an Urban Forest: Implement continuous street tree planting and reinforce the green connections through the Town.

Celebrate Our Local Character: Build upon the qualities that captures Nelson Bay's spirit and mystique. Acknowledge local heritage.

Revitalise Our Urban Fabric: Provide a town where people can lead active and healthy lifestyles, interact and feel safe through well designed public spaces. Explore new technologies.

Be Inclusive and Accessible: Ensure streetscapes and public spaces cater for all ages and abilities.

Evoke Community Pride and Ownership: Provide a safe, enjoyable town for the community to love and safeguard.

Encourage Alternate Transport: Reduce car dependency; Implement active transport infrastructure for cycling, encourage use of public transport by providing efficient and regular services. Consider a town shuttle, create safe pedestrian connections for walking

Celebrate Culture and Creativity: Include interpretive signage /art; community events and entertainment.

Be **Simple** in design, **Consistent** in material and **Economical** in construction.

Note

Images within this document are representations of a 20 year vision. Subject to further detailed design requirements that may result from consideration of;

-Underground services - tree root zones, service corridors and utilities

-Overhead services - power lines

- Topography, WSUD or sustainability principles in the design

Nelson Bay Public Domain Plan 2019

2. Landscape Masterplan

Let's live, work, play and stay here in Nelson Bay where environmental sustainable best practices, healthy living and greening the Town Centre becomes the new standard for our NEXT generation.

Port Stephens Council

Nelson Bay NE

Tract Consultants

2.1 Landscape Masterplan



Concept Only:, Final design subject to technical design considerations detailed investigation of services and relevant approval

Nelson Bay Town Centre will be transformed into a vibrant, well connected network of landscape thoroughfares.

The green corridors will be distinctive, functional and appealing, with a focus on enhancement and showcasing of the local natural biodiversity.

2.2 Connecting the Hills to the Bay



Existing Street Trees of Nelson Bay Town Centre Fig. 1

Fig. 2 Connecting the hills to the bay - Establish continuous green streets to enhance the streetscape experience, encourage walking and cycling Powerlines to be removed/undergrounded to enable street tree vision

08

Concept Only:, Final design subject to technical design considerations, detailed investigation of services and relevant approvals

Port Stephens Council Nelson Bay NEXT Tract Consultants

2.3 Streetscape Design Principles

The Streetscape Design Guideline aims to provide a clear, consistent direction for Council, developers and stakeholders regarding the design, arrangement and materiality of the public realm within Nelson Bay's Town Centre.

The intent is to make streetscapes more consistent and legible, visually pleasing, integrated and cost-effective.

Current Issues

The application of this guidelines across Nelson Bay Town Centre is intended to address the issues currently affecting the streetscape:

- Lack of street tree and other vegetation in the public realm (Refer Fig.1)
- Lack of streetscape hierarchy and urban character
- Obsolete and aging public domain furniture
- Inconsistent pathway widths and materials
- Incomplete pedestrian and cycle links.

Streetscape Design Principles

Be **Simple** in design, **Consistent** in material and **Economical** in construction.

Simple: The structure of the street should be clear, balanced and equitable.

Consistent: Patterns and colours should be visually unifying and complementary. Materials to be durable and relevant to the local character.

Economical: Be easy to construct, replaced and maintained.

"Open space should remain priority even though the demand for car parking seems limitless."



3. Street Typology

Different street types serve different functions. Street types are not necessarily continuous along the entire length of a street; a single street may change typology as the FUNCTION changes.

Port Stephens Council Nelson Bay NEXT Tract Consultants

3.1 Classification of Nelson Bay Town Centre Streets

Traditionally street design is predominately focused on the operational requirements of vehicles. Elements such as lane widths, speeds and geometry favour vehicles over pedestrian and cycle amenities. These traditional classifications should no longer continue to be the determining factors when designing an **INTEGRATED STREET**.

Street design must take into consideration local context and functionality. Different streets serve different functions based on location and the activities which occurs along it. For example, Stockton Street gateway entry will be more operational and visual compared to Stockton Street Village Precinct which will be highly integrated for pedestrian activity.

Integrated Street Design should be:

- Balanced to allow for equitable movement
- Promote healthy and active transportation modes
- Accommodate walking and cycling
- Provide generous footpaths
- Provide durable, quality and aesthetically pleasing street furniture
- Encompassing of street trees, garden beds elements and WSUD best practice.

The streets in Nelson Bay Town Centre will include:

- Special Streets (Pedestrianised for events)
- Shared Zones (Village Precinct)
- Boulevards
- Town Centre Main Streets
- Residential Local Streets.

Special Streets

Special streets focus mostly on pedestrian activities and require high quality, durable finishes. Special streets have the capacity to be closed to vehicles for events and often highlight design features such as water features, playground facilities, catenary lighting, attractive planting, natural material finishes and bespoke furniture.

Special streets are individually designed and detailed to be site specific. They are attractive, inviting, safe and often the showcase piece within the Town.

Example street: Stockton Street (north section)

Shared Zones - Village Precinct

A shared zone is a street with a single grade or surface that is shared by pedestrians, cyclist and vehicles within a slow speed environment. These streets support a variety of activities including retail, cafes and restaurants, outdoor entertainment and outdoor dining.

Shared zones are often surfaced with pavers. Traditional kerb and gutters are replaced with flush edging and combined into the paving treatment. Because these streets are at one grade, street furniture such as bollards, planters, garden beds, lights and benches assist with defining the edges.

The main design consideration for shared zones is to maintain a slow 10km/h speed environment to minimise conflict between users. Shared zones have limited short stay parking restrictions and loading zones, to ensure priority is pedestrian and cyclist focused.

Example streets: Stockton Street and Magnus Street (Village Precinct) Subject to future detailed design considerations.

Boulevards

Boulevard by definition is a broad tree lined avenue. Boulevards usually have areas along the side or centre for tree planting. Boulevards often have wide footpaths connecting important gateways, civic centres or natural features. Boulevards often feature longer block lengths and can support active transport or public transport routes.

Example streets: Stockton Street (south of Donald Street), Church Street / parts of Government Road.

Town Centre Main Streets

Main streets are primarily located within the core centre of town. They are the main service streets, providing residents and visitors the daily essentials with services ranging from local grocery stores, banking services, postal services, beauty salons, retail and support local businesses.

Main Streets are usually the meeting point for locals to gather. They prioritise cyclists and walking, support short stay parking and are serviced by public transport (bus routes).

Example streets: Donald Street and Yacaaba Street, parts of Government Road and Victoria Parade.

Residential Local Streets

Residential locals streets are those which serve the vast residential properties in the town. These streets are usually one travel lane each way and have lower vehicle and pedestrian volumes. Local streets can be well defined with footpaths and tree planting to encourage continuous and comfortable pedestrian and cycle connections. Street furniture is limited to "mid-trip" locations to provide relief.

Example street: Tomaree Street

Note:

Footpath must fall out to kerb and be a min 50mm below FFL of adjoining properties, subject to detailed design.

3.2 Stockton Street & Magnus Street: Shared Zones

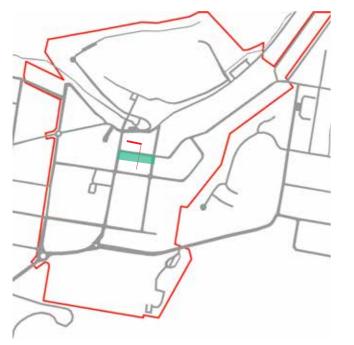


STREET PERSPECTIVE: Stockton Street Shared Zone (Landscape design indicative only)

Concept Only:, Final design subject to technical design considerations, STREET PERSPECTIVE: Magnus Street Shared Zone (Landscape design indicative only) detailed investigation of services and relevant approvals

Concept Only:, Final design subject to technical design considerations, detailed investigation of services and relevant approvals

3.3 Magnus Street: Shared Zone



Shared Zone

Pedestrian Light

garden beds

Slow speed 10km/h stretcher

Paired arrangement with banners.

Kerb extensions allow for greater landscape areas with feature tree

planting and passive irrigation to

Feature Palm Planting

Livistonia australis

Extended Landscape Zones

pattern Paving to necessary engineering specification.

Legend

2

Main Paving 1

Stretcher Pattern: Paving to necessary engineering specification.

Outdoor Dining

Cafe licence areas for street eats. Allowance for cafe umbrellas, tables and chairs clear of main 7 path of travel.

Street Tree

3 Trees to be planted into engineered root cells to ensure effective root zones. 8

4 Parallel Parking

Stretcher Pattern: Paving to necessary engineering specification.



6

KEY PUBLIC DOMAIN ELEMENTS

Street Type

- Shared Zone (Village Precinct)
- Slow Zone 10km/h.

Location

Magnus Street Village Precinct.

Street Geometry

- 20m road reserve
- 9m wide southern verge for outdoor dining (existing width).
- 4.5m slow one way traffic lane (heading east).
- 2.5m wide 1P short stay parallel parking and loading zones.

Footpath, Kerbs and Carriageway

• Single grade surface.

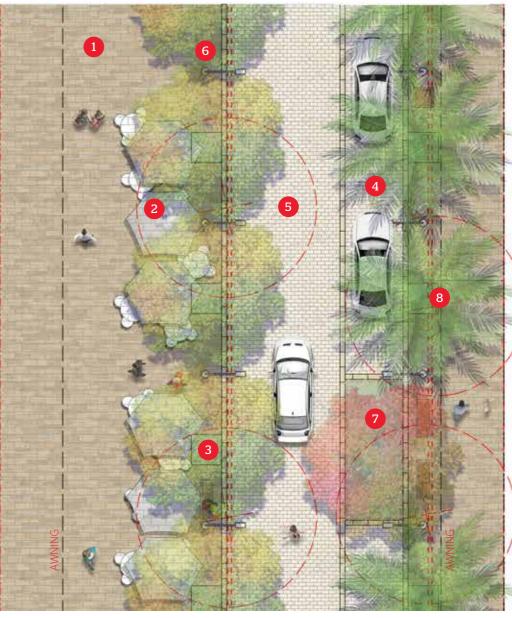
Streetscape Elements

- Public domain furniture to assist with defining edges
- Stone paving surface treatments
- Feature art paving (subject to future design)
- · Multi function street lights with banners and pedestrian lighting - paired arrangement.

Landscape Treatments

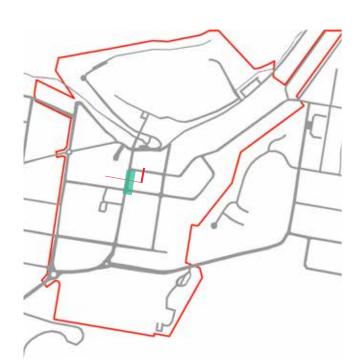
- Deciduous street tree planting
- Feature palm planting and flowering trees •
- Kerb extensions with low mass WSUD garden beds . (passive irrigation treatments)





Concept Only:, Final design subject to technical design considerations, topogrpahy, detailed investigation of services and relevant approvals

3.4 Stockton Street: Shared Zone



Legend

2

4

Main Paving 1

Stretcher Pattern: Paving to necessary engineering specification.

Cafe licence areas for street eats.

Allowance for cafe umbrellas, tables and chairs clear of main

Trees to be planted into engineered[']root cells to ensure

Stretcher Pattern: Paving

to necessary engineering

Carriageway

effective root zones. Parallel Parking

Outdoor Dining

path of travel. 3 Street Tree

specification.

Planting

P Parking

Shared Zone

Slow speed 10km/h stretcher pattern paving to necessary engineering specification.

Pedestrian Light 6

Paired arrangement with banners and flower pots.

Existing trees to be removed subject to

professional aborists

assessment

• Public domain furniture to assist with defining edges

• Stone paving surface treatments

Footpath, Kerbs and Carriageway

KEY PUBLIC DOMAIN ELEMENTS

Shared Zone (Village Precinct)

• Slow Zone 10km/h

and Donald Street).

Street Geometry

• 20m road reserve

6.5m wide footpaths

• Single grade surface

Streetscape Elements

Street Type

Location

• Feature art paving (subject to future design)

• 4.5m slow one way traffic lane (southbound)

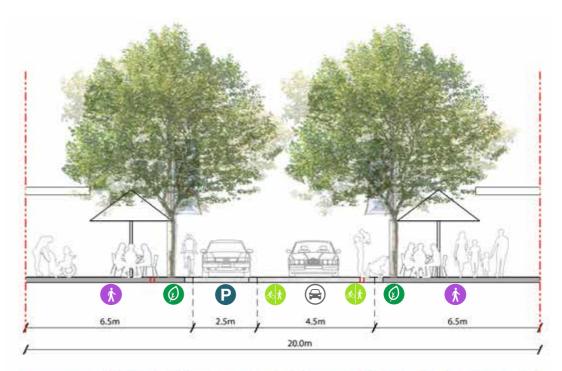
• Multi function street lights with banners and pedestrian lighting - paired arrangement.

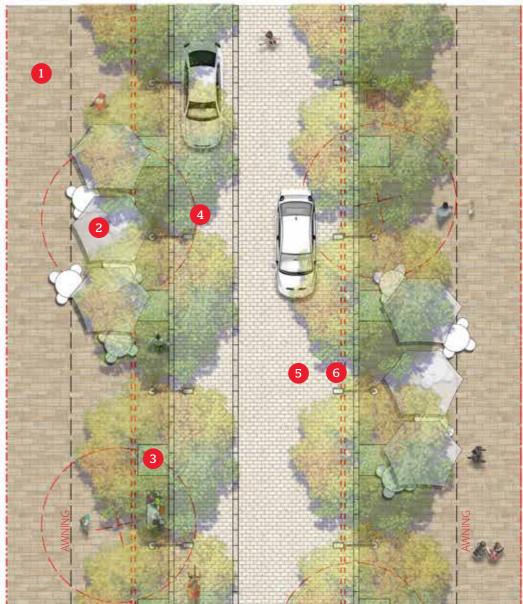
Stockton Street Village Precinct (between Magnus Street

• 2.5m wide 1P short stay parallel parking and loading zones.

Landscape Treatments

- Deciduous street tree planting with garden bed
- Feature flowering trees •
- · Passive irrigation to tree pits and garden beds.





Concept Only:, Final design subject to technical design considerations, topogrpahy, detailed investigation of services and relevant approvals

shared Zone δ

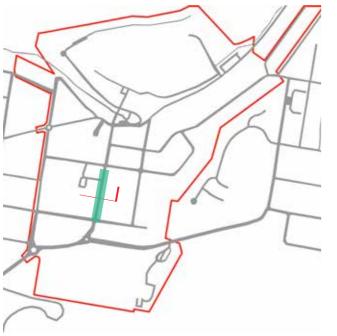
relocated

WSUD / Bio-Swales 💦 Footpath

Cycleway 😑 Public Transport --- Existing kerb lines to be removed/

14

3.5 Stockton Street Boulevard: Town Centre





2

Main Paving 1

Stretcher Pattern: Paving to necessary engineering specification.

Kerb Extension

Garden bed with feature tree planting and passive irrigation

Street Tree 3

Continuous deciduous street tree planting in WSUD garden beds

Parking 4

> Parallel parking with occasional kerb build-outs

5 Street Furniture

Amenities located along street for pedestrian comfort



Overhead powerlines to be relocated underground Shared Path --- Existing kerb lines

to be removed/ relocated

KEY PUBLIC DOMAIN ELEMENTS

Street Type

- Boulevard (Pedestrian Priority)
- Medium zone 40km/h.

Location

• Stockton Street Boulevard. (Tomaree Street to Donald Street)

Street Geometry

- 20m road reserve
- 4m wide footpaths
- 2.5m wide 1P short stay parallel parking
- 3.5m travel lanes.

Footpath, Kerbs and Carriageway

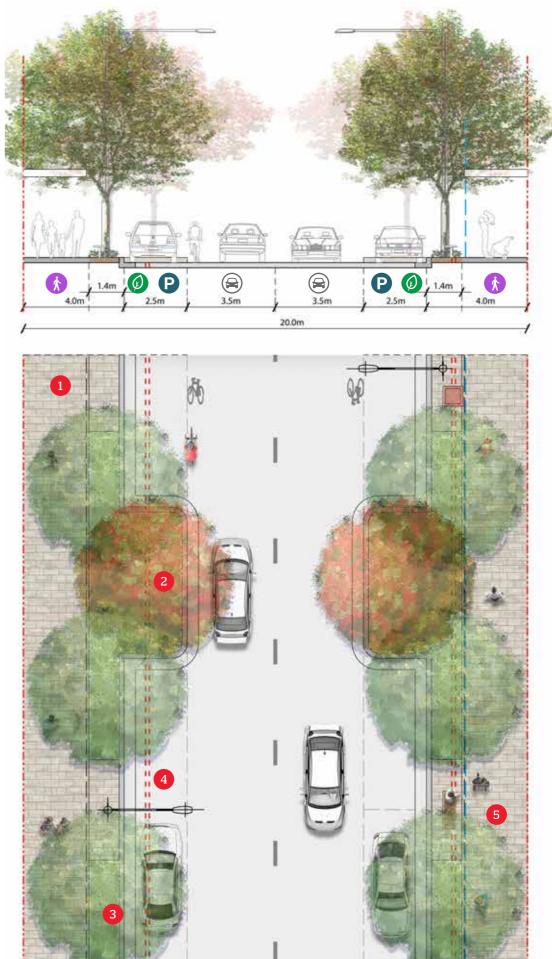
- · Traditional kerb and gutter treatment
- Precast concrete paving.

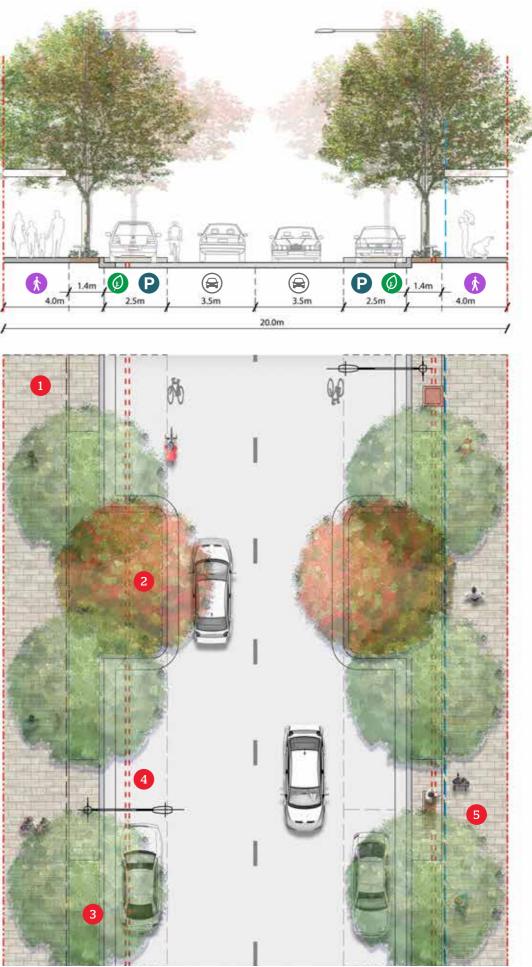
Streetscape Elements

- Public domain furniture
- Multi function street lights with banners staggered arrangement.

Landscape Treatments

- Continuous street tree planting in WSUD garden beds
- Kerb extension for feature tree planting.





Concept Only:, Final design subject to technical design considerations, topogrpahy, detailed investigation of services and relevant approvals

3.6 Stockton Street Boulevard: Southern Entry



Legend

1 Shared Path

Insitu concrete finish

Native Planting

Native tree planting along boundary

Street Tree Planting

Street tree planting in garden bed verge

Carriageway

Cycleway 😩 Public Transport



Street Type

- Boulevard (Collector Road as per PDP)
- Peripheral 50km/h.

Location

Stockton Street Southern Entry.

Street Geometry

- Road narrows from 30m to 20m road reserve •
- Transition portion from Gateway Park to Town Centre •
- Shared path: 3m wide insitu concrete path
- 3.5m travels lanes
- 2m wide planted verges for clearance to shared path.

Footpath, Kerbs and Carriageway

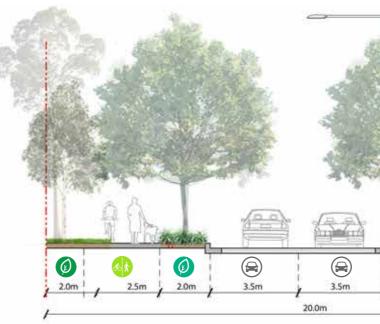
- Traditional kerb and gutter treatment
- No parking in this section.

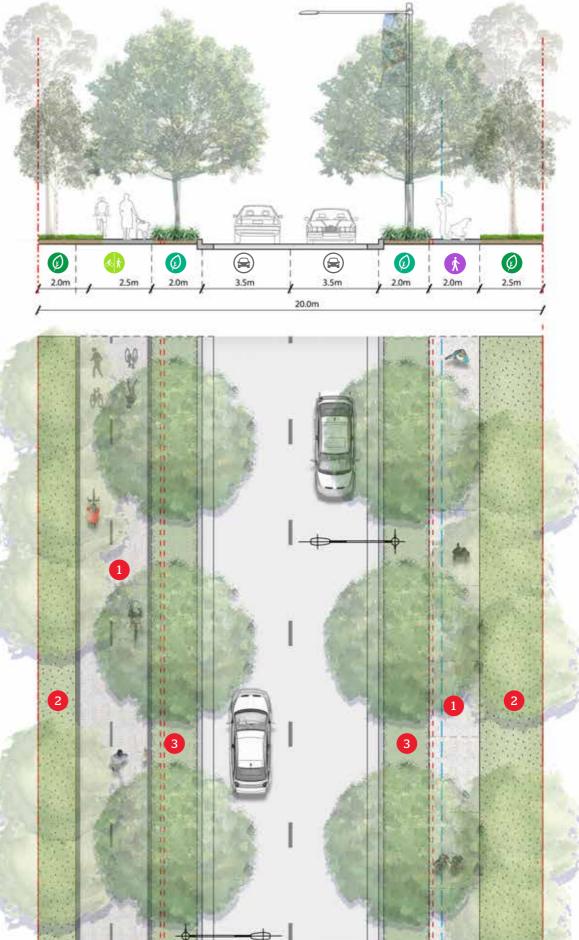
Streetscape Elements

• Multi function street lights with banners - staggered arrangement.

Landscape Treatments

- Verge tree planting at 8-10m spacing with low understo planting
- Grass verge along boundary lines with informal small tre planting.





shared Path

--- Existing kerb lines to be removed/

relocated

WSUD / Bio-Swales 🚯 Footpath

- - Overhead powerlines

to be relocated

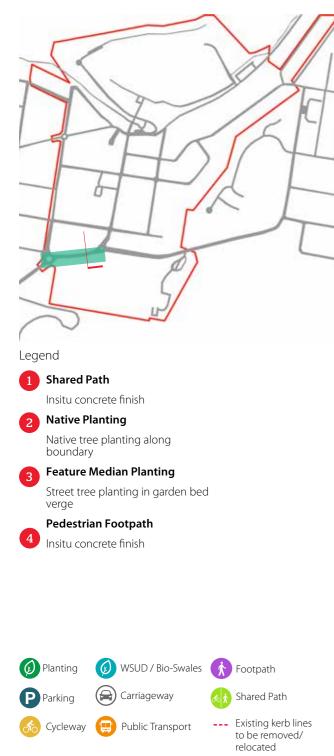
underground

Planting

P Parking

Concept Only:, Final design subject to technical design considerations, topogrpahy, detailed investigation of services and relevant approvals

3.7 Stockton Street Boulevard: Gateway Treatment



- - Overhead powerlines to be relocated underground

KEY PUBLIC DOMAIN ELEMENTS

Street Type

- Gateway Treatment (Sub-Arterial Road as per PDP)
- Peripheral 50km/h.

Location

Stockton Street Gateway.

Street Geometry

- 30m road reserve
- Gateway Park and Nelson Bay Gateway Sign (Northern Verge)
- Shared Path: 3m wide insitu concrete
- Separated 4m traffic lanes.

Footpath, Kerbs and Carriageway

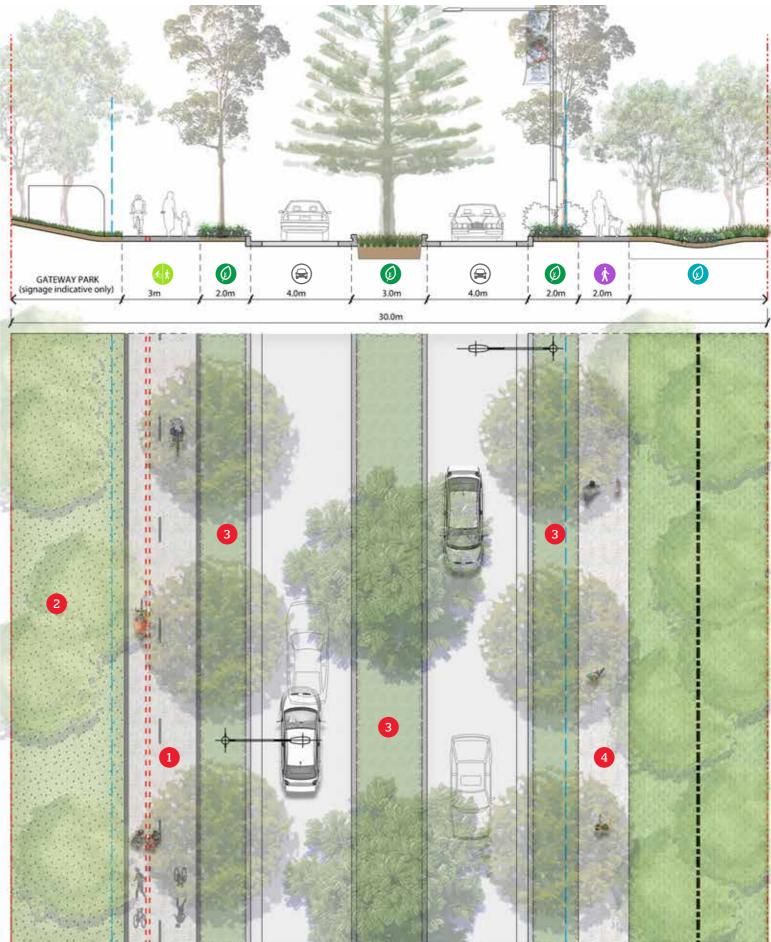
- No parking
- Traditional kerb and gutter treatment.

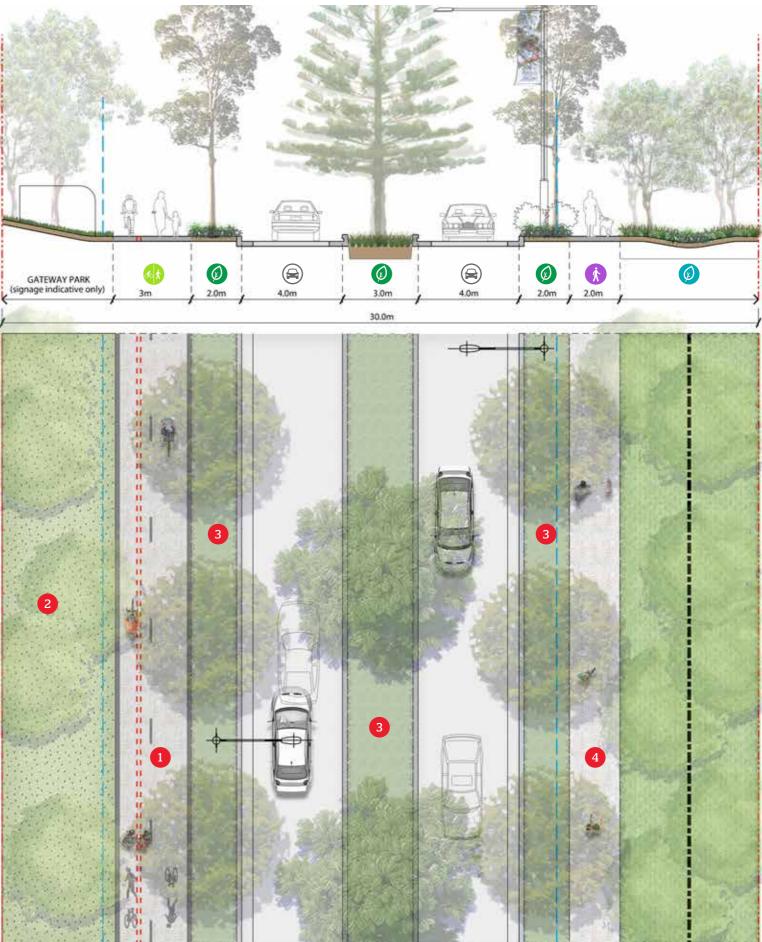
Streetscape Elements

- Gateway wayfinding signage and artwork
- Multi function street lights with banners Staggered arrangement.

Landscape Treatments

- Green Gateway Reinforce connection to adjacent vegetation reserves with native plant palette
- 2m wide planted verges
- 3m wide median with feature gateway tree planting
- Biodiversity Swale (Southern Verge).





Concept Only:, Final design subject to technical design considerations, topogrpahy, detailed investigation of services and relevant approvals

3.8 Victoria Parade: Foreshore Section



KEY PUBLIC DOMAIN ELEMENTS

Street Type

- Boulevard (Pedestrian Priority)
- Medium Zone 40km/h.

Location

• Victoria Parade Foreshore Section.

Street Geometry

- 20m road reserve
- Separated cycleway along northern verge: 3m wide with • 600mm wide separation median
- Footpath:3.5m wide southern verge along retail strip
- 2.5m wide parallel parking •
- 3.5m wide traffic lanes.

Footpath, Kerbs and Carriageway

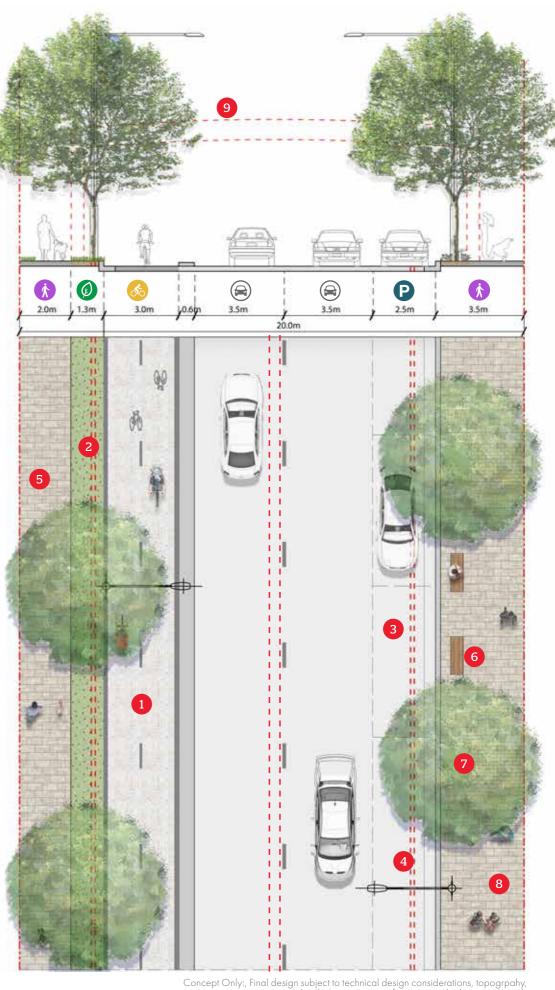
• Traditional kerb and gutter treatment.

Streetscape Elements

- Public domain furniture seats, litter bins, bike racks and • wayfinding signage
- · Stone and/or precast paving footpaths with insitu concrete cycleway
- · Multi function street lights with banner and pedestrian lights.

Landscape Treatments

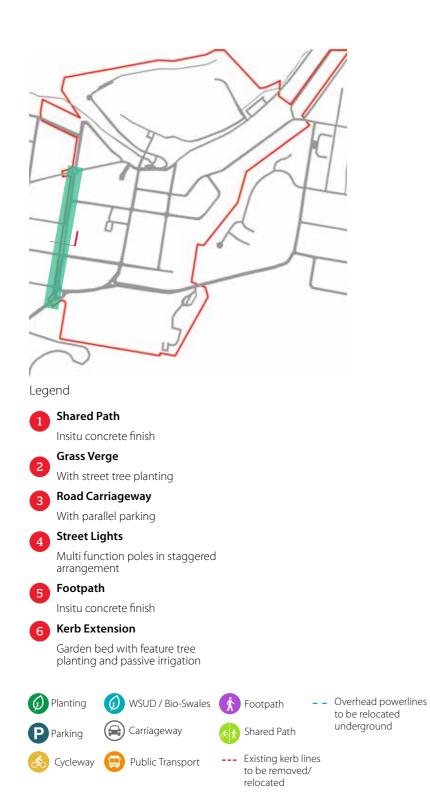
- Grass verge with street tree planting along cycleway side. •
- Street trees in paving to be planted into engineered root • cells to ensure effective root zones



Concept Only:, Final design subject to technical design considerations, topogrpahy, detailed investigation of services and relevant approvals

Note : Overhead pedestrian footbridge to be structurally assessed and retained only if feasible

3.9 Church Street: Boulevard



KEY PUBLIC DOMAIN ELEMENTS

Street Type

- Boulevard (Sub-Arterial Road as per PDP)
- Peripheral 50km/h.

Location

• Church Street entire length.

Street Geometry

- 20m road reserve
- Allow southern gateway treatment at Nelson Bay Road and western gateway at Government Road
- Shared path: 3m wide insitu concrete paving (eastern verge)
- Footpath: 1.5m wide insitu concrete paving (western verge)
- 2.5m wide parallel parking (where turning lanes required, remove parking lane)
- 3.5m travel lanes.

Footpath, Kerbs and Carriageway

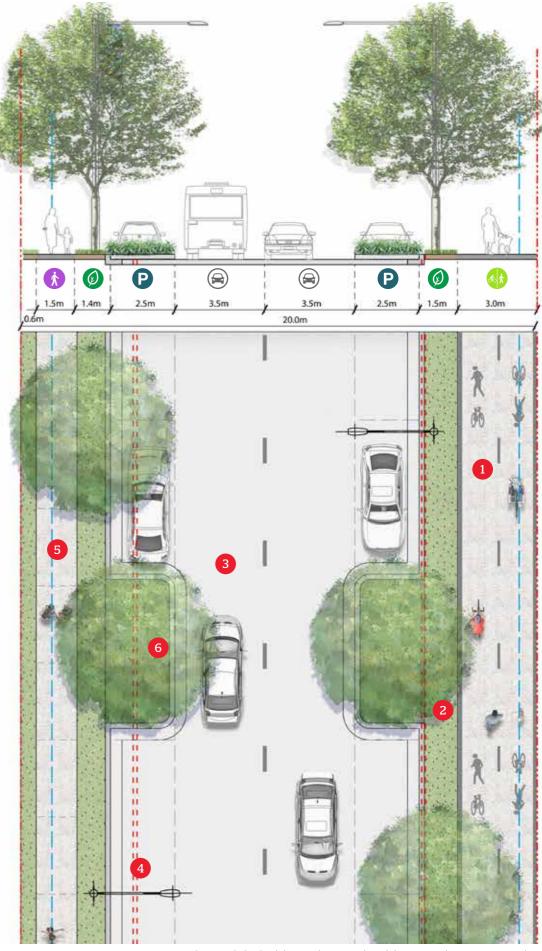
• Traditional kerb and gutter treatment.

Streetscape Elements

- Public domain furniture limited to 'mid-trip' locations
- Multi function street lights with banner, flower pots and pedestrian lights.

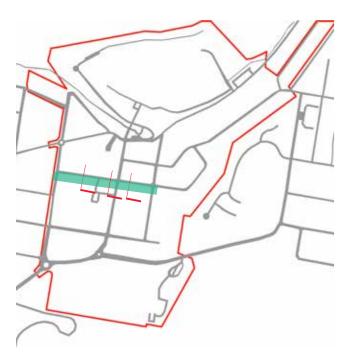
Landscape Treatments

- 1.5m Grass verge with continuous street tree planting
- 600mm wide grass clearance strip along boundary.



Concept Only:, Final design subject to technical design considerations, topogrpahy, detailed investigation of services and relevant approvals

3.10 Donald Street: Town Centre Main Street



Legend

Main Paving 1

Stretcher Pattern: Paving to necessary engineering specification.

Highlight Paving 2

Stretcher Pattern: 1Paving to necessary engineering specification.

Vehicle Crossovers

Stretcher Pattern: Paving to necessary engineering specification.

Street Tree Planting

Trees to be planted into engineered root cells to ensure effective root zones. For all new trees in paving. Tree pit under to be 4m x 2.5m min.



Streetlights

Multi-Function Poles (HUB) in

staggered configuration

KEY PUBLIC DOMAIN ELEMENTS

Street Type

- Town Centre Main Street (Collector Road as per PDP)
- Medium Zone 40km/h.

Location

• Donald Street - Main Street.

Street Geometry

- 20m road reserve •
- Commercial activity streets •
- 4m wide footpaths with vehicle crossovers, outdoor dining and bus • stops (refer to individual treatments)
- 2.5m parallel parking
- 3.5m wide traffic lanes.

Footpath, Kerbs and Carriageway

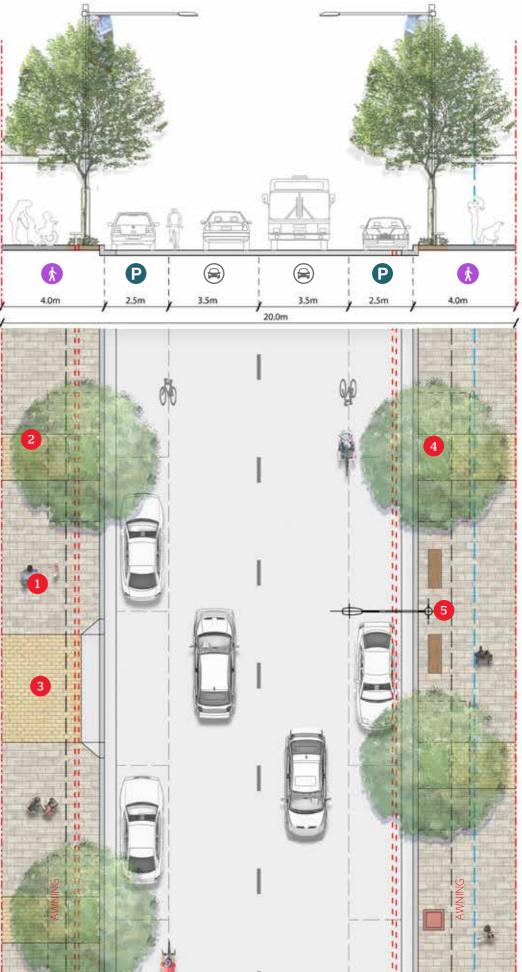
· Traditional kerb and gutter treatment

Streetscape Elements

- Public domain furniture seats, litter bins, bike racks and wayfinding • signage
- Precast concrete paving with highlight sections
- Multi function street lights with banner, flower pots and pedestrian lights. •
- Continuous awning along shop fronts •

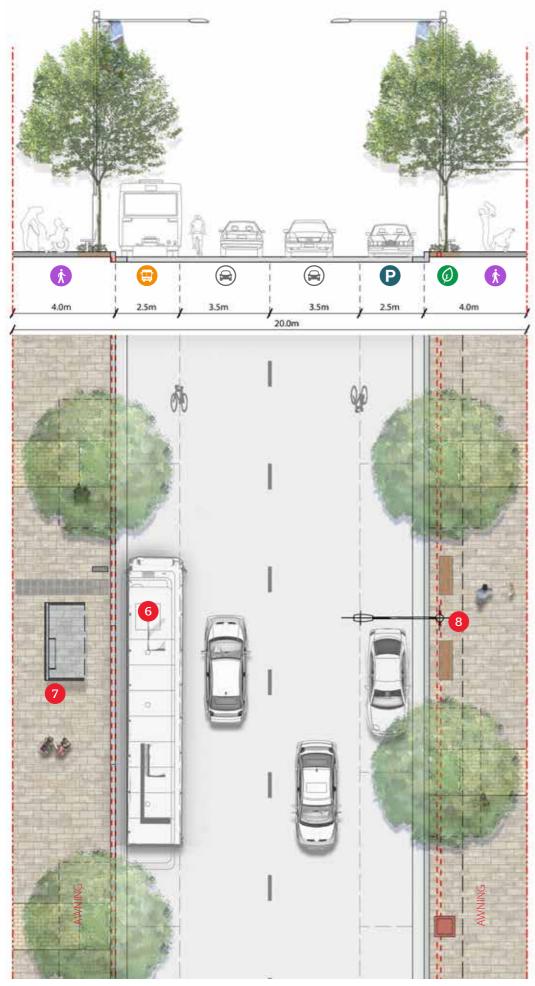
Landscape Treatments

- Deciduous street trees in paving Trees to be planted into engineered root • cells to ensure effective root zones.
- Donal Street / Stockton Street Intersection subject to future design • (Signalised intersection with kerb extensions)
- Extended landscape zones for greater landscape planting and feature tree planting.

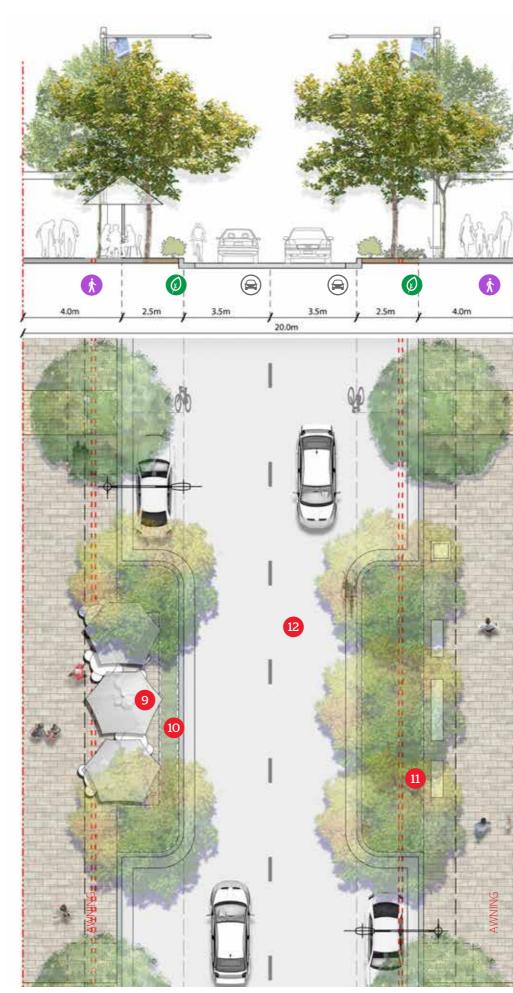




Concept Only:, Final design subject to technical design considerations, topogrpahy, detailed investigation of services and relevant approvals



Concept Only:, Final design subject to technical design considerations, topogrpahy, detailed investigation of services and relevant approvals



Concept Only:, Final design subject to technical design considerations, topogrpahy, detailed investigation of services and relevant approvals

Legend

6 Bus Zone

Kerb side bus stop

7 Bus Shelter

Bus shelter, TGSI's and signage (Smart Streets Connections)

8 Street furniture

Amenities located along street for pedestrian comfort

Outdoor Dining

Cafe licence areas for street eats. Allowance for cafe umbrellas, tables and chairs clear of main path of travel

10

9

Hedge Planting

Planting along outdoor dining to ensure safety and comfort for diners.

11

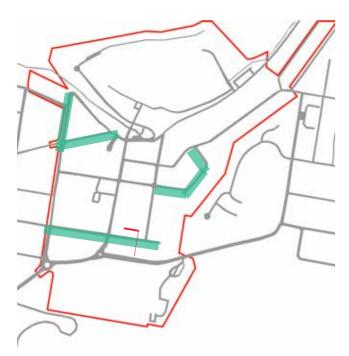
Extended Landscape Zones

Kerb extensions allow for greater landscape areas with feature tree planting and passive irrigation to garden beds

12 Slow Vehicle Traffic

Reduce lane widths to slow traffic for pedestrian safety

3.11 Local Street: Residential Streets



Legend

Grass Verge 1

With street tree planting

2 Road Carriageway With parallel parking

3 Street Lights

Multi function poles in staggered arrangement

4 Footpath Insitu concrete finish



KEY PUBLIC DOMAIN ELEMENTS

Street Type

- Residential Local Street
- Medium Zone 40km/h.

Location

• Residential streets.

Street Geometry

- 20m road reserve •
- Residential streets (low volumes) with vehicle crossovers •
- Footpath: 1.5m wide insitu concrete paving
- 2.5m wide informal parallel parking.

Footpath, Kerbs and Carriageway

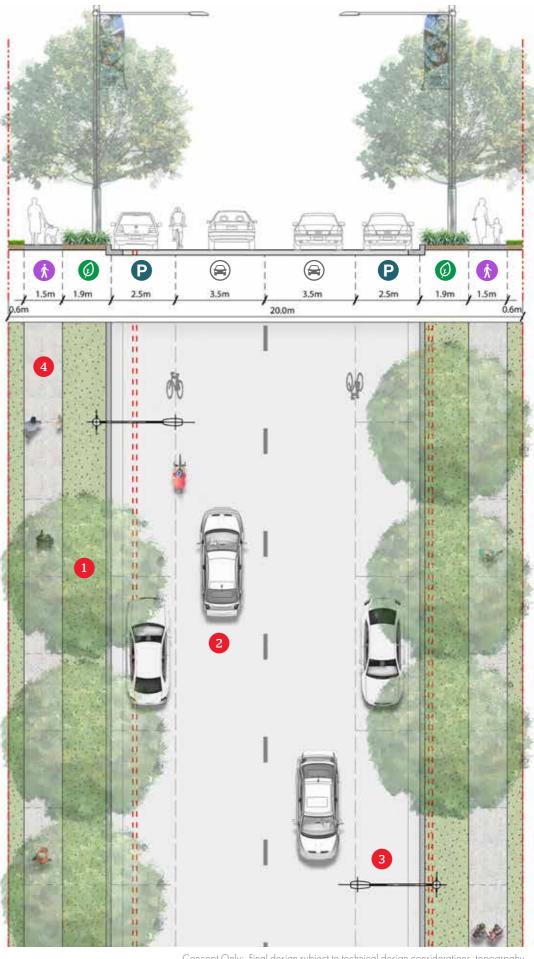
• Traditional kerb and gutter treatment.

Streetscape Elements

- Public domain furniture limited to 'mid-trip' locations
- Standard streets lights.

Landscape Treatments

- 1.5m Grass verge with continuous street tree planting where possible, avoiding vehicle crossovers
- 600mm wide grass clearance strip along boundary.



Concept Only:, Final design subject to technical design considerations, topogrpahy, detailed investigation of services and relevant approvals

3.12 Stockton Street: Shared Zone [Balanced Concept]



Legend

1 Main Paving Stretcher Pattern: Paving to necessary engineering specification.

2 Outdoor Dining

Cafe licence areas for street eats. Allowance for cafe umbrellas, tables and chairs clear of main path of travel.

3 Street Tree

Trees to be planted into engineered root cells to ensure effective root zones.

4 Shared Zone

Slow speed 10km/h stretcher pattern to necessary engineering specification.

Existing trees to be

removed subject to

professional aborists

assessment

--- Existing kerb lines to be removed/ relocated

Pedestrian Light

Paired arrangement with banners

Street Furniture Custom seating along mall for pedestrian comfort

Note: Street can be closed for market and event days.

KEY PUBLIC DOMAIN ELEMENTS

Street Type

- Shared Zone
- Slow Zone 10km/ h

Location

Stockton Street Village Precinct

Street Geometry

- 20m road reserve
- 6.5m wide footpaths
- 4.5m slow one way traffic lane
- 2.5m wide 1P short stay parallel parking on western side of Stockton Street

Footpath, Kerbs and Carriageway

• Single grade surface

Streetscape Elements

- Public domain furniture to assist with defining edges
- Stone paving surface treatments
- Feature art paving (subject to future design)
- Multi function street lights with banners and pedestrian lighting paired arrangement
- Continuous awnings to shop fronts

Landscape Treatments

• Deciduous street tree planting with garden bed planting at base of trees



Concept Only:, Final design subject to technical design considerations, topogrpahy, detailed investigation of services and relevant approvals



STREET PERSPECTIVE: Stockton Street Shared Zone (Landscape design indicative only)

Concept Only:, Final design subject to technical design considerations, detailed investigation of services and relevant approvals

3.13 Stockton Street: Shared Zone [Pedestrianised for Events]



Legend

Main Paving 1

Stretcher Pattern: Paving to necessary engineering specification.

Outdoor dining areas

2 Activation of cafes, restaurants and bars within the plaza during the day and evening. Allow for continuous awning along shop fronts.

Street Tree 3

Trees to be planted into engineered root cells to ensure effective root zones.

4 Shared Zone

Slow speed 10km/h stretcher pattern 150 x 300 x 60mm stone paving with stone flush kerbs.

5 Pedestrian Light

Paired arrangement with banners

--- Existing kerb lines to be removed/ relocated

Existing trees to be removed subject to professional aborists assessment

Variety of seating with integrated planting 6

Bespoke furniture and planters with feature planting.

Market Stall 7

Street can be closed and become a fully pedestrianised mall where markets and events may be held

8 Intersection Threshold

Formalise the intersection of Magnus and Stockton Streets to form "Town Square". Vehicle movement to be slowed with strategically placed bollards and street furniture elements to delineate between pedestrian only areas and vehicle access areas

9 **Deciduous Street Planting**

Continuous deciduous street tree planting to ensure solar access to streets in winter.



Concept Only:, Final design subject to technical design considerations, topogrpahy, detailed investigation of services and relevant approvals

4. Paving Typologies

°ort Stephens Council

Velson Bay N

Tract Consultants

4.1 Paving Material

PAVEMENT DESIGN CONSIDERATIONS

Street pavements are a significant part of the public realm and their quality has a direct effect on the pedestrian experience of a place.

- Pavements should be the unifying element in the streetscape, setting a clear canvas for other streescape elements which may provide contrast, movement and texture.
- Pavements should provide clear distinction between pedestrian priority footpaths and vehicle use areas.
- Pavements should be comfortable and allow ease of movement for all users including people with different degrees of abilities.
- Pavements should be a consistent pattern with occasional textural, size and colour variations to alert users of change of conditions or hazards.
- Pavements should reinforce streetscape hierarchy.
- Pavement material should be high quality, durable, robust, easy to maintain and are easy to install, remove and relay.

Three main pavement materials have been identified for Nelson Bay Town Centre:

- Type 1 Natural Stone Paving
- Type 2 Precast Concrete Paving Units
- Type 3 Insitu Concrete.

MATERIAL

Type 1 - Natural Stone Paving

Natural Stone Paving to be reserved for public places of special significance. The main 'heart' of Nelson Bay (lower Stockton Street, Magnus Street, Apex Park) should be considered for a high percentage of natural stone paving.

Stone can be incorporated with other materials to reinforce the identity and character of the town centre.

Type 1 paving will require specific bespoke design.

Type 2 - Precast Concrete Paving

Precast concrete paving is currently being used in Nelson Bay Town Centre. The existing pavers are perceived as being "outdated", however they have withstood years of wear and high traffic volumes.

High quality concrete unit pavers continue to be suitable for use within the central commercial streets of Nelson Bay's Town Centre. Recommendation is to continue with existing colour palettes with the paving pattern updated to reflect current contemporary applications.

Type 3 - Insitu Concrete Paving

Insitu concrete paving to be used on the residential and peripheral streets around the city centre.

Type 4 - Public Art Paving Feature

Public Art Paving Feature to be an overlay within the Village Precinct and Apex Park. Design subject to future detailed design. Opportunity to engage local artist.

PEDESTRIAN RAMPS

Pedestrian ramps to be paved with the same material as the surrounding footpath.

KERB AND GUTTER

All kerb and gutters to be insitu concrete.

Flush stone kerbline to be applied in Stockton and Magnus Street shared zones.

VEHICULAR CROSSOVERS

All vehicular crossovers to maintain adjacent pavement type to reinforce pedestrian priority.

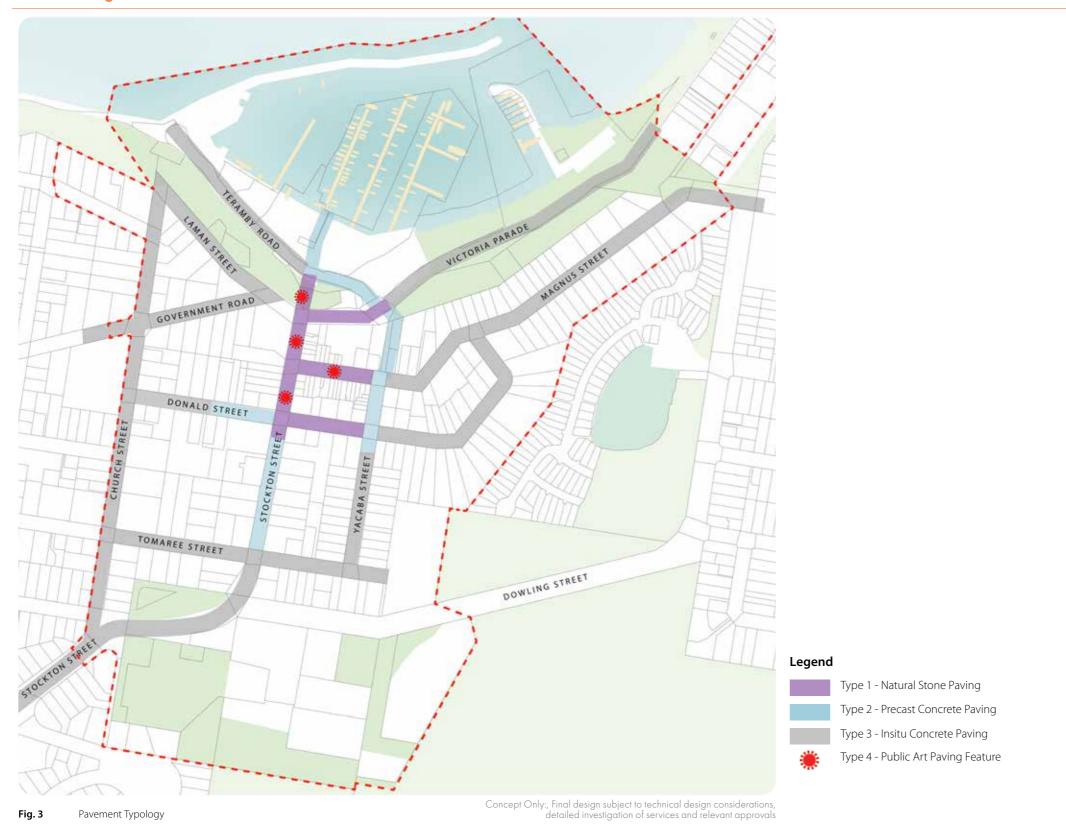
PARKING BAYS

All streets to be asphalt to match roadway.

Stone setts or small stone paving units to delineate parking bays in Stockton and Magnus Street Shared Zones.

Nelson Bay Public Domain Plan 2019

4.2 Paving Material Palette



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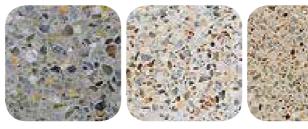
Type 1 Natural Stone Paving







Type 2 Precast Concrete Paving



PREFERRED PRECAST CONCRETE UNITS

- Standard sized pavers with a variety of warm and grey tones
- Warm colour mixes with brown / red aggregates
- Urbanstone Golden Gunmetal, Albany Beige, River Topaz or approved equivalent .

Type 3 Insitu Concrete Paving

Type 4 Feature Public Art Paving (subject to future design)





PREFERRED INSITU CONCRETE PAVING

Site poured concrete with colours, finishes and aggregates to be selected depending on the setting and location







PREFERRED STONE PAVING

- Selected stone varieties with warm tones and a variety of textures and finishes: Preferred Granite
- Selected granite stones and setts with a variety of warm sandy tones and a variety of warm and cool grey: Preferred Porphry
- Selected stones and setts with rusty and blue grey tones

5. Street Furniture

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5.1 Street Furniture

STREET FURNITURE CONSIDERATIONS

Streetscape furniture creates settings for resting, sitting, dining and social gatherings with friends and family. These settings are important for the elderly, less mobile and young families as they provide relief and comfort. Properly selected and placed furniture can encourage people to venture outside and enjoy/activate the public domain.

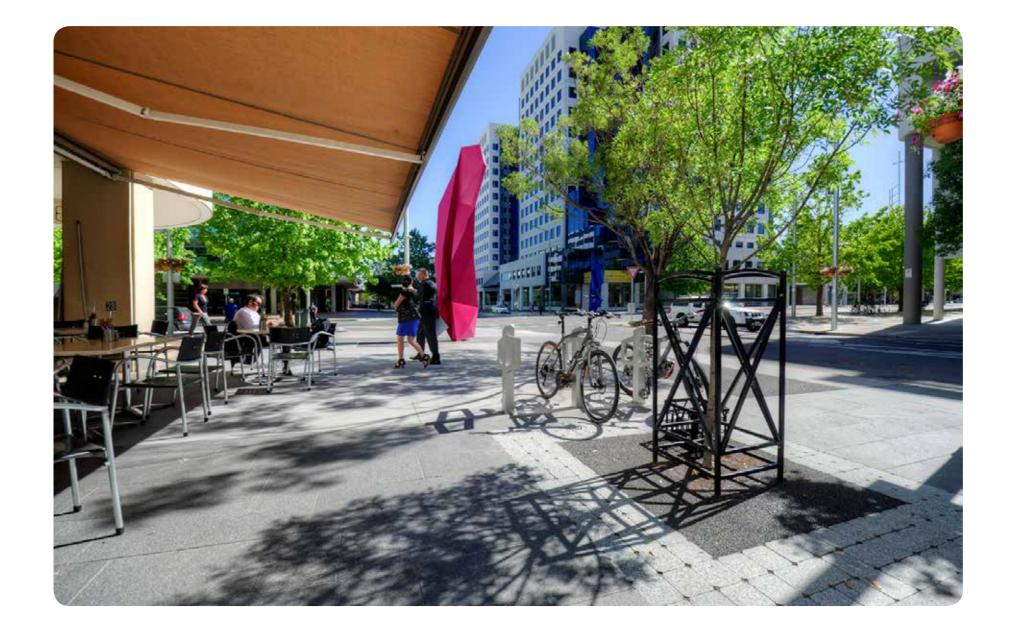
The furniture palette should be consistent across the town centre, with feature bespoke items dedicated to special streets and special places. The main objective is to create easily maintained, convenient and publicly accessible amenities that do not interrupt the pedestrian or traffic flow.

The placement of street furniture should be based on the street function and relate to the patterns and design of the hard landscape elements on site. Street furniture should not give an appearance of being cluttered, where possible amenities should be grouped and arranged in a linear sequence along a street.

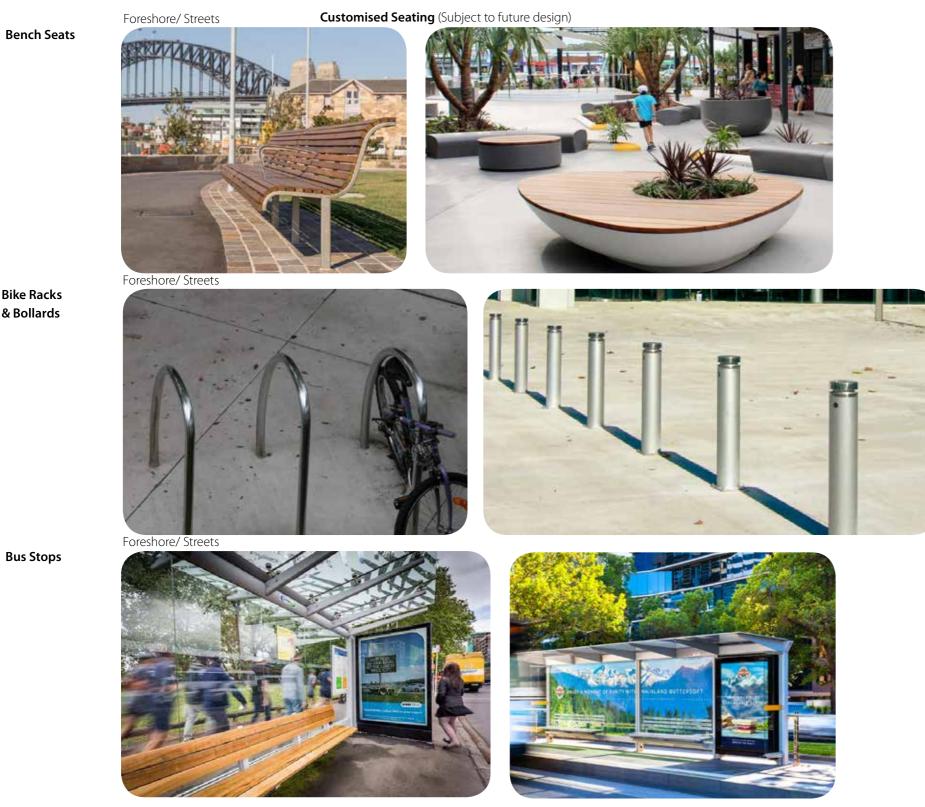
Furniture should be selected to meet the different needs of different users and be constructed from safe materials to prevent injury, without sharp edges or entrapment gaps. Furniture shall be securely mounted onto the sub-surface blinding slab to conceal fasteners.

The choice of material should depend on the context and be suitable for the local character. The designs should be simple in form.

The following furniture palette should be considered for use in Nelson Bay Town Centre and surrounds.



5.2 Street Furniture Palette



Bike Racks & Bollards

Bus Stops

Foreshore/ Streets

Foreshore/ Streets

Drinking Fountain and Re-fill stations Multi Function

Poles





Foreshore Lighting





Litter Bins and Recycling Centres





6. Street Tree Masterplan

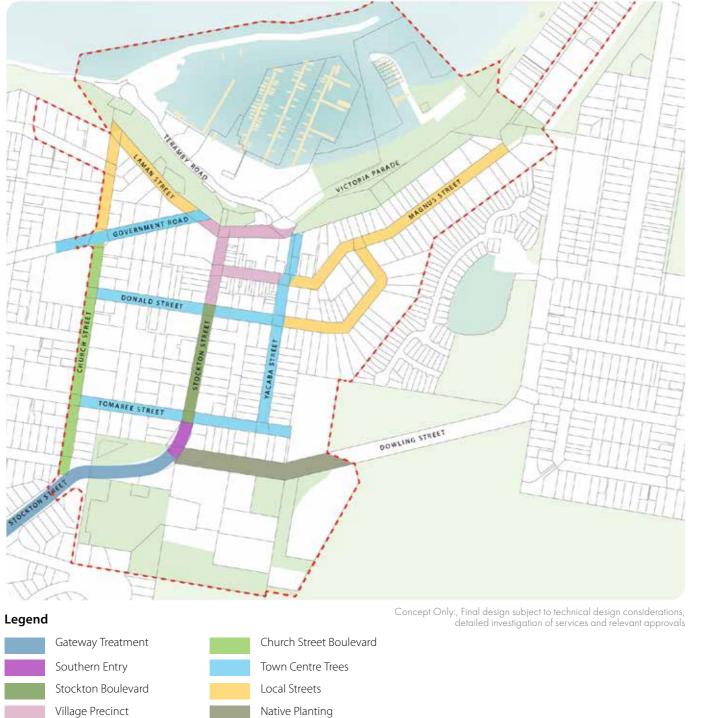
Street trees are a vital urban element that can transform streets and provide numerous environmental, aesthetic, cultural and economic benefits.

Port Stephens <u>Council</u>

Velson Bay NEX1

Tract Con<mark>sul</mark>

6.1 Street Tree Masterplan



Street Trees

Street trees are a significant component of the urban fabric. Street trees have the ability to transform the physical appearance of the street, provide environmental, aesthetic and economical benefits.

Priority should be given to implementing street trees as they create a sense of place and enhance the public domain.

The environmental benefits of street tree planting include:

- Carbon storage and release oxygen
- Provide shade relief to footpaths, cars and buildings
- Remove gas pollutants
- Are natural pollution filters for the air and water system
- Captures and slow runoff to reduce erosion of soils
- Provide habitat and food source for fauna
- Reduction of urban heat island effects

The social benefits of street tree planting include:

- Improving attractiveness of streets
- Provide shade for pedestrian and creating feelings of relaxation and well being
- Calm and slow traffic by providing a barrier between
 pedestrians

Establishing a green city should be the main driver for Nelson Bay Town Centre. Connecting the Hills to the Bay through street tree planting will improve the overall appeal of the town for residents and visitors.

Note

Street tree species and other planting will be selected from the plant palettes by Council's technical staff taking into account a range of matters including aesthetics and streetscape character, environmental tolerances, and maintenance and other functional requirements.

6.2 Plant Schedule - Trees

The right tree for the right location

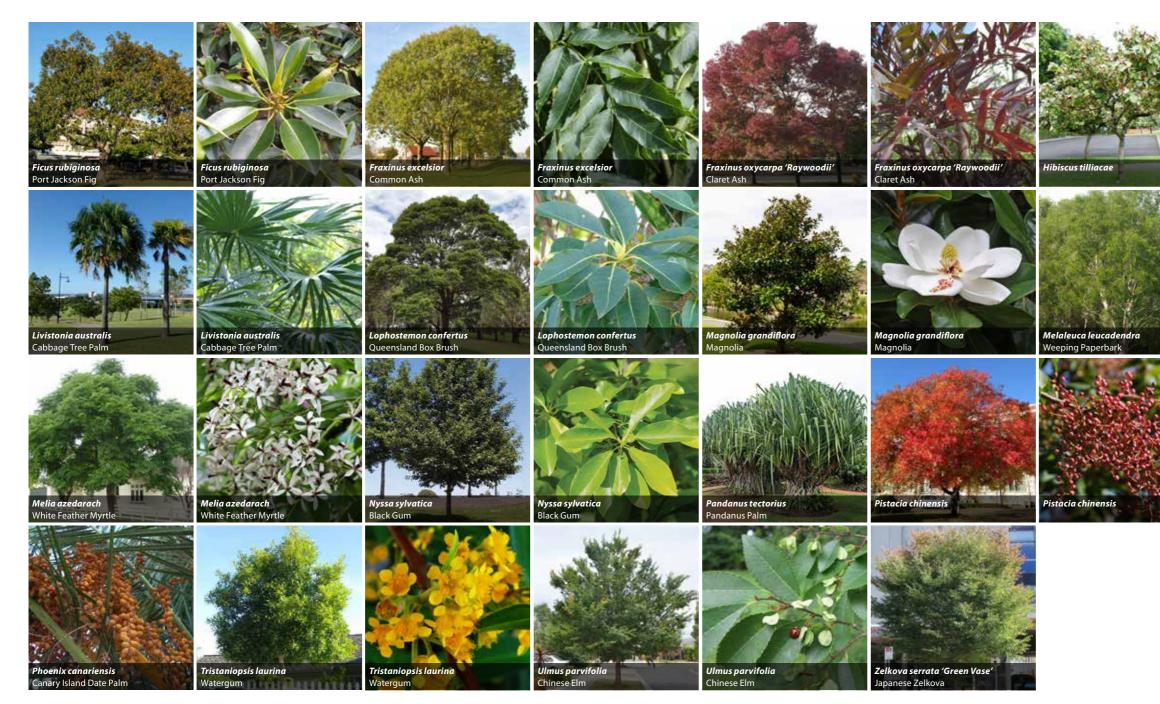
Gateway Treatment Araucaria cunninghamii - Hoop Pine Araucaria heterophylla - Norfolk Island Pine Corymbia maculata - Spotted Gum Corymbia ficifolia- Red Flowering Gum Eucalyptus pilularis - Blackbutt Eucalyptus piperita - Sydney Peppermint Gum Eucalyptus tereticornis - Forest Red Gum Livistonia australis - Cabbage Tree Palm Ulmus parvifolia - Chinese Elm	 Median: Tall landmark trees providing link to Apex Park Verge: Species selection reflects existing vegetation character. Evergeen trees providing shade to pathway
Southern Entry Ulmus parvifolia - Chinese Elm Corymbia maculata - Spotted Gum Corymbia ficifolia- Red Flowering Gum Eucalyptus pilularis - Blackbutt Eucalyptus piperita - Sydney Peppermint Gum Eucalyptus tereticornis - Forest Red Gum Livistonia australis - Cabbage Tree Palm	 Road Edge: Tall spreading deciduous trees to form a consistent canopy cover. Back of Verge: Predominately native species reflecting existing vegetation character with a smaller tree for solar access
Village Precinct Delonix regia - Poinciana Nyssa sylvatica 'NXSXF' Forum - Nyssa Zelkova serrata "Green Vase' - Green Vase Livistonia australis - Cabbage Tree Palm Pandanus tectorius - Pandanus Palm	 Mixture of deciduous and evergreen trees to provide solar access, visual interest and seasonal colour. Sculptural form that characterise the village precinct.
Town Centre, Stockton & Church Street Boulevards Ulmus parvifolia - Chinese Elm Zelkova serrata "Green Vase' - Green Vase	 Medium sized trees, in proportion to buildings Deciduous trees to allow for solar access, V-shaped or domed consistent canopy cover
Local Streets <i>Lophostemon confertus</i> - Queensland Box Brush <i>Tristaniopsis laurina</i> - Watergum	 Evergreen trees providing shade to pathway Medium sized tree where no constraints, smaller tree in association with services and views. Spreading canopy to ensure consitent canopy cover. Non invasive root system.
Promenade Ficus rubignosa - Port Jackson Fig Magnolia grandiflora - Magnolia Melaleuca leucadendra - Weeping Paperbark Pandanus tectorius - Pandanus Palm Phoenix canariensis - Canary Island Date Palm	 Parkland species of varying size and shape Species selection reflects existing vegetation character of the Promenade.
(Tree list subject to review)	

BOTANICAL NAME	COMMON NAME	SIZE Height + Spread (m)	FORM	DECIDUOUS OR EVERGREEN
Angophora costata	Smooth Bark Apple	15-25 x 5-15m	Large, spreading to broad-domed	Evergreen
Araucaria cunninghamii	Hoop Pine	40 x 12m	Symmetrical, cone-shaped tree	Evergreen
Araucaria heterophylla	Norfolk Island Pine	20-35 x 10-15m	Symmetrical, cone-shaped tree	Evergreen
Backhousia citridora	Lemon Scented Myrtle	3-20 x 1-5m	Rounded crown, Dense canopy	Evergreen
Banksia serrata	Old Man Banksia	3-15 x 2-4m	Irregular	Evergreen
Buckhamia celsissima	Ivory Curl Flower	8-25 x 1-4m	Rounded crown, Dense canopy	Evergreen
Corymbia citriodora 'Scentuous'	Dwarf Lemon Scented Gum	7 x3m	Oval	Evergreen
Corymbia ficifolia	Red Flowering Gum	10 x 5m	Spreading	Evergreen
Corymbia maculata	Spotted Gum	10-35 x 10-20m	Irregular	Evergreen
Cupaniopsis anacardioides	Tuckeroo	10 x 5m	Spreading, dense canopy	Evergreen
Cupaniopsis pavifolia	Small Leaf Tuckeroo	8 x 4m	Spreading, dense canopy	Evergreen
Delonix regia	Poinciana	5-12 x 5m	Spreading, vase	Deciduous
Eucalyptus pilularis	Blackbutt	30-70 x 10m	Tall, spreading	Evergreen
Eucalyptus piperita	Sydney Peppermint Gum	20 x 9m	Tall, spreading	Evergreen
Eucalyptus tereticornis	Forest Red Gum	20 x 10m	Tall, spreading	Evergreen
Ficus obliqua	Small Leaf Fig	60 x 30m	Domed, large trunk	Evergreen
Ficus rubiginosa	Port Jackson Fig	30 x 10m	Buttressed	Evergreen
Fraxinus excelsior	Common Ash	15 x 5m	Medium dome	Deciduous
Fraxinus oxycarpa 'Raywoodii'	Claret Ash	12 x 7m	Oval	Deciduous
Hibiscus tilliaceus	Sea Hibiscus	4-8 x 4m		Evergreen
Livistonia australis	Cabbage Tree Palm	20 x 6m	Straight, Tall	Evergreen
Lophostemon confertus	Queensland Box Brush	10-25m x 5-15m	Spreading	Evergreen
Magnolia grandiflora	Magnolia	25 x 10m	Oval	Evergreen
Melaleuca leucadendra	Weeping Paperbark	10 x 8m	Weeping	Evergreen
Melia azedarach	White Feather Myrtle	15 x 6m	Rounded crown, Dense canopy	Deciduous
Nyssa sylvatica	Black Tupello	11 x 6m	Round	Deciduous
Pandanus tectorius	Pandanus Palm	8 x 4m	Spreading	Evergreen
Pistacia chinensis	Chinese Pistachio	8 x 6m	Round	Deciduous
Phoenix canariensis	Canary Island Date Palm	16 x 10m	Large spreading palm	Evergreen
Tristaniopsis laurina	Water Gum	10 x 6m	Spreading	Evergreen
Ulmus parvifolia	Chinese Elm	12 x 7m	Broad, Domed	Deciduous
Zelkova serrata 'Green Vase'	Japanese Zelkova	14 x 10m	V-shaped	Deciduous

6.3 Plant Palette - Trees



6.4 Plant Palette - Trees













6.5 Plant Palette - Hedges, Shrubs, Grasses & Groundcovers





STREET PERSPECTIVE: Magnus Street Shared Zone (Landscape design indicative only)

Concept Only:, Final design subject to technical design considerations, detailed investigation of services and relevant approvals

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For more information please contact Development Services

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Port Stephens Council



WAYFINDING STRATEGY AND CONCEPT DESIGN June 2019







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Supported by the



This project was funded by Port Stephens Council and the Australian Government, and administered on behalf of the NSW Government by the NSW Department of Industry.

Introduction

The wayfinding strategy report is based on our initial client and community meetings and site investigations. It is intended to demonstrate our understanding of the project needs and opportunities and propose strategic wayfinding and interpretation solutions for Nelson Bay Town Centre. Following feedback from this report, the design standards will be further developed.

Key design objectives for Wayfinding and interpretation signage design from the project brief are -

- relate to the built environment and help define the character and sense of place for Nelson Bay
- connect key precincts such as the town centre and the waterfront
- promote tourist information at key locations within the town centre and the foreshore
- provide directions with walking times to popular destinations including beyond Nelson Bay
- improved vehicular directional signage to car parks and key destinations
- direct traffic to Shoal Bay along Dowling Street
- interpretation signage that is educational and recognise ecology, indigenous and non-indigenous history
- be sustainable, safe and easily maintained



Investigation

Context

Nelson Bay is a suburb and major town in the Port Stephens local government area in the Hunter Region of New South Wales.

It is 60kms from Newcastle and 200kms from Sydney.

It has population of approximately 5,500.

It is easily accessed by road, public and commercial transport services.



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Character

Situated among a collection of picturesque estuarine and marine bays and beaches, Nelson Bay has long been a destination for a holiday or retirement.

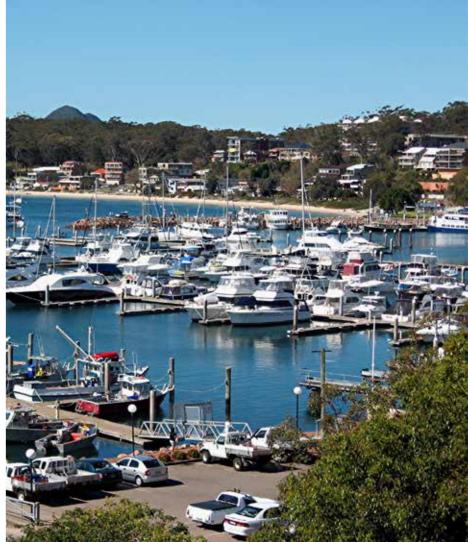
With it's recent growth in popularity, the coastal fishing village "treads a sensible line between tourism and charm".

The town centre sports a large marina in the bay, waterfront walkways and restaurants that specialise in fresh local produce and seafood.









Charm

Bounded by an array of bay and ocean beaches that host significant aquatic recreation facilities, Nelson Bay is a friendly, community-driven town where you will more than likely be greeted with a heartfelt "Good morning" before noon.

Nelson Bay's appeal lies in it's unspoilt beaches, and myriad of water activities for young and old including –

- fishing,
- surfing for all abilities,
- snorkelling and diving,
- Dolphin Cruises and
- Whale Watching.







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Beyond Nelson Bay

- Toboggan Hill Park, Gan Gan Lookout and Nelson Bay Lighthouse are short walks from the town centre.
- Stockton Sand Dunes is the perfect location for 4WDriving, quad biking, sand boarding and camel beach rides.
- Broughton Island and 'Looking Glass', located just north of Nelson Bay, as well as Fly Point aquatic reserve host prolific, local marine life that can be observed by snorkelling and scuba diving.
- Tomaree and Worimi National Parks, are home to hiking and walking trails, Fort Tomaree and historic gun emplacements.
- The Hunter Valley, Australia's oldest wine region, is the backyard to Port Stephens and Nelson Bay's waterfront.









Nelson Bay Destinations

Key destinations and services that are to be included in the wayfinding system in directions and maps.

Site Identification	Nelson I	Bay	
Precinct Identification	Foreshore	То	wn Centre
Primary Destinations	Information Centre Nelson Bay Apex Pa Nelson Bay Foresho D'Albora Marina Laidler Walk Reserve	ore Reserve	Post Office Places of Wors Education Fac Community Co
Secondary Destinations	Toilets Car Parks	BBQ's Playgro	ound Nelson War Mel
Car Parks	Donald Street	Government Road	Victoria
Beyond Nelson Bay	Port Stephens Shoal Bay Fingal Bay Salamanda Bay	Tomaree National Worimi National Pa Tobboggan Hill Pa	ark I



Vehicular Circulation

Gateways and Vehicular Directional Signage

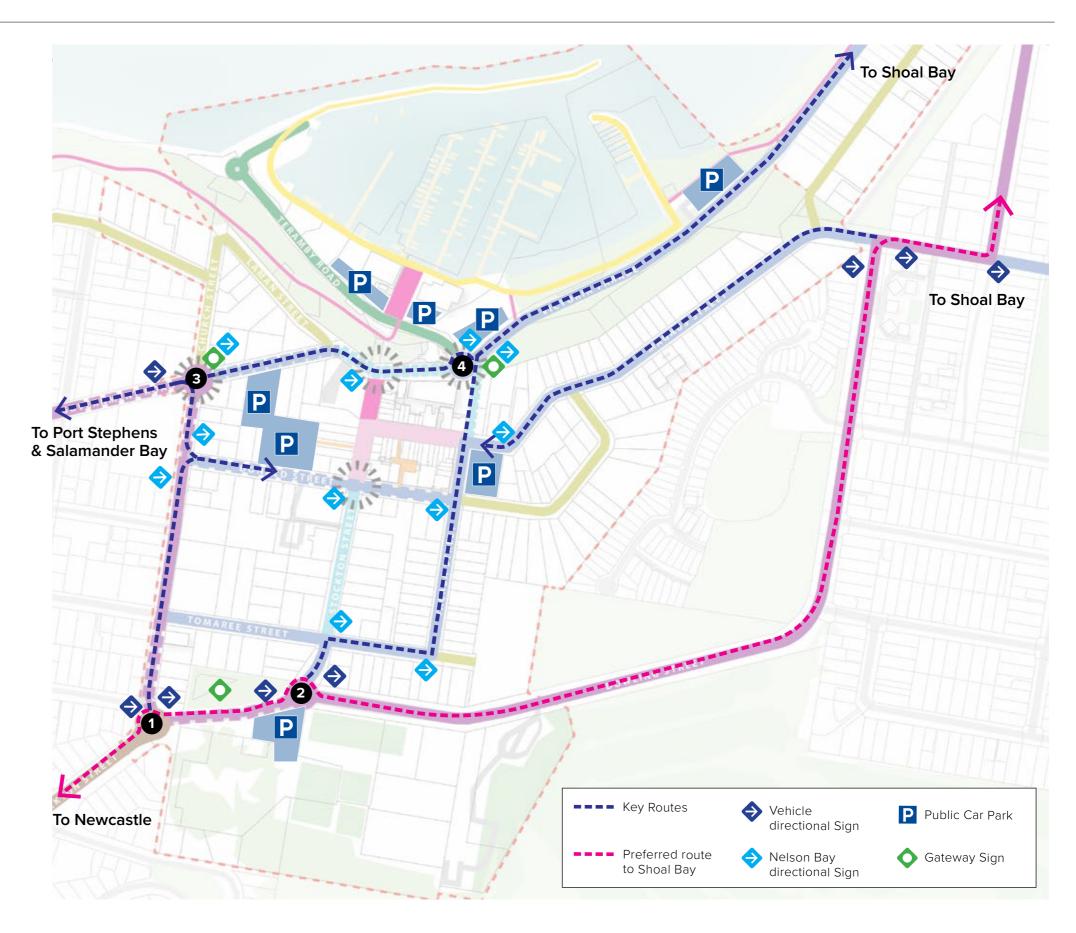
Shown in this plan are the primary vehicular routes proposed to travel into and bypass the Town Centre. This is intended to be achieved through standard traffic control (MUTCD) signage as well as bespoke vehicular directional signs that form part of the Town Centre signage suite.

In particular, traffic to Shoal Bay and Fingal Bay is directed to travel around the Town Centre on Dowling Street.

The proposed Gateway locations are shown on the plan with intersections one and two forming the primary gateway and intersections three and four as secondary gateways.

The final plan for all vehicular and Town Centre directional signs can be finalised based on confirmation of all traffic routes. The new and modified traffic control (MUTCD) signage will need to be assessed and planned by a traffic consultant.

Note: Concept only – final design subject to technical design considerations, detailed investigation of services and relevant approvals.



Gateway Location

Vehicular Arrival

1. Stockton and Church Streets

2. Stockton and Dowling Streets

Proposed strategy

These two intersections, with the adjoining parkland are to provide vehicular traffic directions in line with the recent traffic plan as well as create a Nelson Bay gateway threshold.

Traffic Control Signage

Update existing traffic control signs to show desired vehicle flows to Shoal Bay and Nelson Bay at both intersections as shown.

Confirm if left directions to Nelson Bay Parking only is appropriate at Stockton and Church Streets.

Gateway Threshold

The Gateway Threshold to include Nelson Bay announcement, other elements and possible public art on the park edge and be visible from Stockton and Church intersection.

Note: Concept only – final design subject to technical design considerations, detailed investigation of services and relevant approvals.





Right on roundabout towards Shoal and Fingal Bays.





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Proposed MUTCD signage.



Gateway Location

Vehicular Arrival

3. Church Street and Government Road

4. Victoria Parade and Government Road

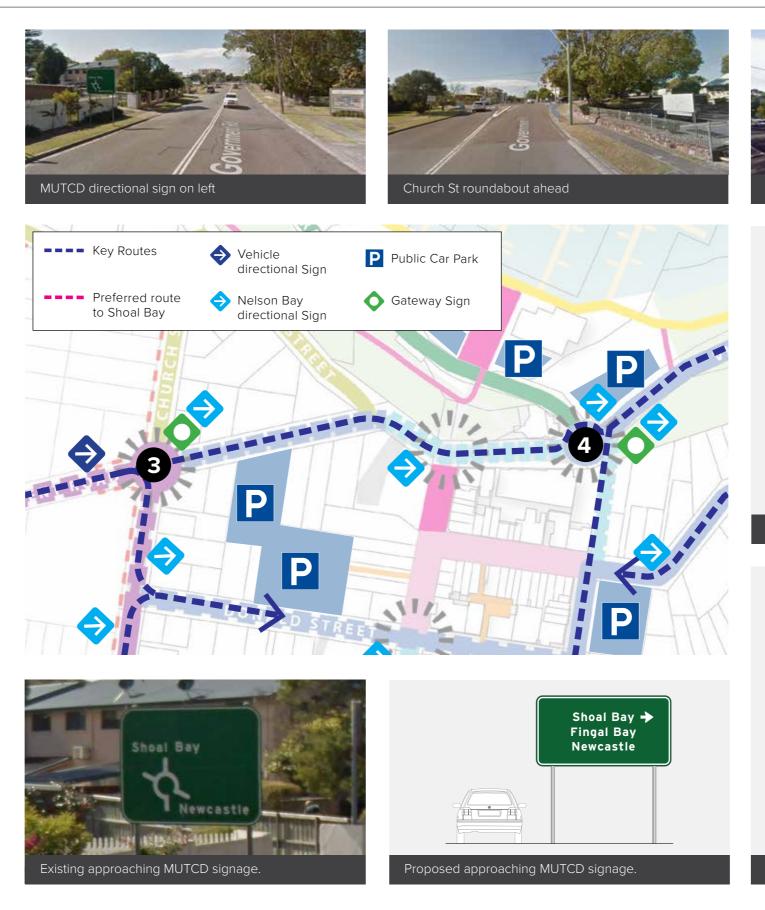
Proposed strategy

This intersection is considered as a Gateway Threshold into Nelson Bay. There is limited public land to introduce a gateway statement in this area.

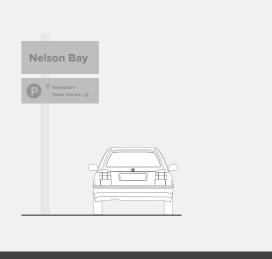
Car Park Directional

Directional signs to car parks can form part of the Nelson Bay signage suite rather than apply traffic control (MUTCD) sign types. Placement of these signs will still require coordination and approvals within Council and RMS.

Note: Concept only – final design subject to technical design considerations, detailed investigation of services and relevant approvals.







Indicitive gateway and directional signage.



Pedestrian Circulation

High level pedestrian circulation and proposed sign locations are shown. This plan will develop as the Public Domain Plan is developed. Information and mapping and directional signs are used together for form a network of information across the Town Centre. Locations for information and mapping signs are proposed in central gathering areas within the Town Centre. Directional signs should are placed at high public traffic intersections and pathways around the Town Centre and Foreshore.

Note: Concept only – final design subject to technical design considerations, detailed investigation of services and relevant approvals.



Visual Language

Marine Culture







NELSON BAY PUBLIC REALM WAYFINDING AND SIGNAGE DESIGN - WAYFINDING STRATEGY AND CONCEPT DESIGN · JUNE 2019

15

Colour Studies

The colour palette developed for Nelson Bay draws from the area's rich marine culture. By focusing on the ocean life, the palette is authentic to place.

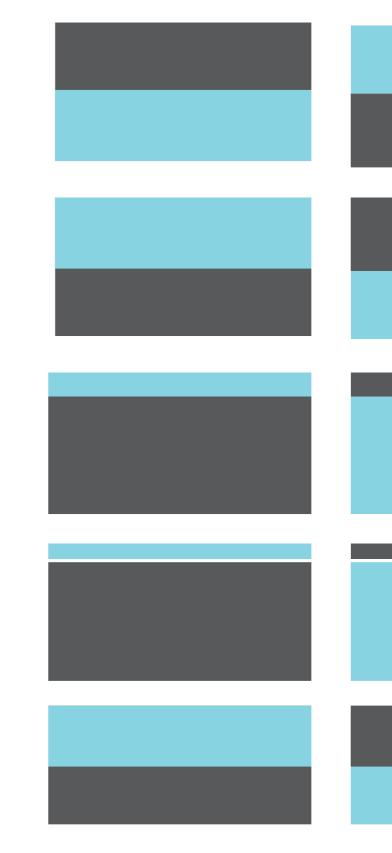


Plimsoll Line

Above and Below the Line

Referencing the fishing and marine culture of the area, the Plimsoll Line used on a boat's hull has been explored as a graphic device to organise information and build authentic identity.







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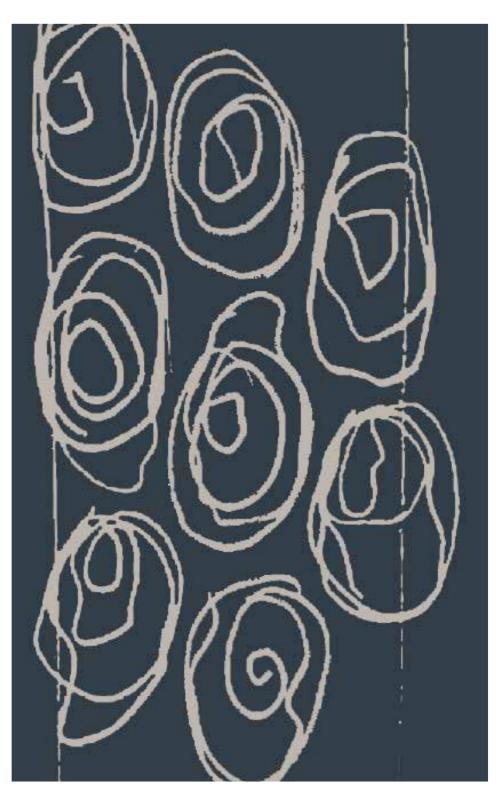
The Oyster

The NSW north coast oyster industry is an integral part of the fabric of coastal communities providing employment, sustainable seafood and is a watchdog for estuarine water quality.

This distinctive shapes and colours provide opportunities to be applied to the visual language of the graphics and signage.







Universal Pictograms

Universal pictograms are legible and understandable for all users and visitors. There is a range of general, water and marine related, and regulatory pictograms that will be used throughout the Wayfinding system.

The pictograms can be used to demonstrate the specific marine recreational activities of Nelons Bay and the surrounding areas – boating, fishing, walking, whale watching, sight-seeing and lookouts, etc.

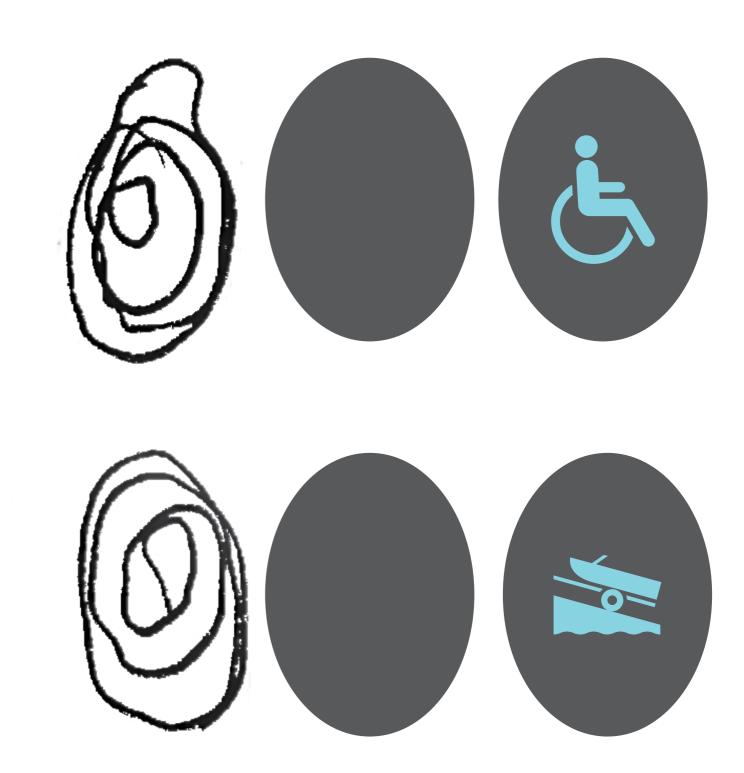
Picotgrams provide readily recongisable information to support text. They work on their own and more importantly communicate with non-English speaking user groups.



Bespoke Pictograms

There is opportunity to create a sense of place and character through the use of organic forms inspired by the oyster shell.





Typography

Arial and Helvetcia are highly-legible, geometric sans serif fonts that are very well suited as a display text and for destination messaging across a Wayfinding system.

The typeface reflects the charming and laid back character of Nelson Bay.

It captures characteristics of marine life through its fluid form – a and 8 – and hook-like elements expressed in the tails of y, k and l.

Numerals are clear and easy to read.

Arial

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789

ABCDEFGHIJKLMNOPQRSTUVWXYZ Helvetica abcdefghijklmnopqrstuvwxyz 0123456789

Helvetica bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789

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Nelson Bay

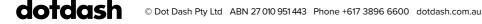
Primary Message - Site Identification

FORESHORE TOWN CENTRE

Apex Park Foreshore Reserve D'Albora Marina Laidler Walk Reserve

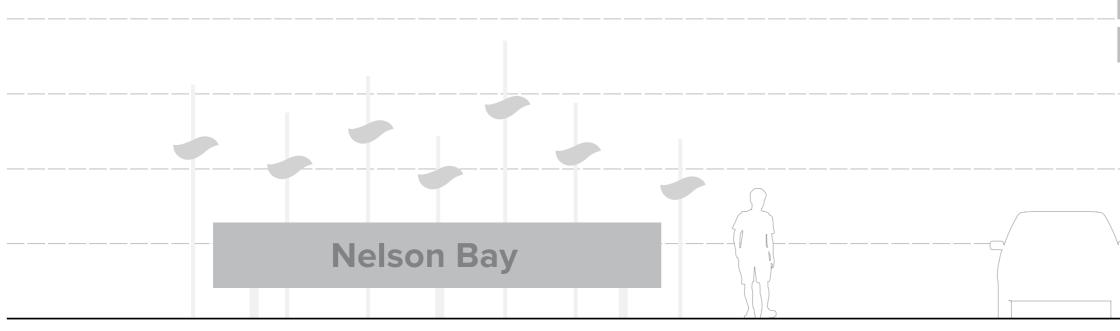
Precinct Identification

Secondary Message - Primary Destinations



Wayfinding Strategy

The Schematic Sign Family is intended to show the range of sign types that will be required based on their Wayfinding function. It does not demonstrate the design of the signs.





ID1a - Gateway Major Entry Identification Announcement of arrival to Nelson Bay

Typical Location

– Gateway Park on Dowling Street

Description

- Possible sculptural/art statement
- Identifies Nelson Bay
- Illumination



Typical Location

– Church Street and Government Road intersection

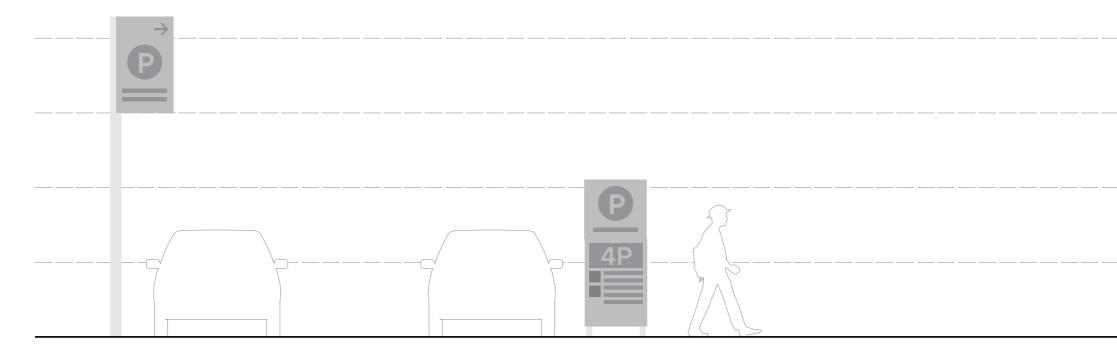
Description

- Sculptural statement
- Identifies Nelson Bay
- Illumination
- Can include directional information

	5000mm
Nelson Bay	
-	4000mm
_	
	3000mm
	2000mm
	1000mm
	FFL

4

The Schematic Sign Family is intended to show the range of sign types that will be required based on their Wayfinding function. It does not demonstrate the design of the signs.





DR1 - Vehicular Direction Direct vehicles to parking areas

Typical Location Key vehicle circulation streets

Description

- Directional information and pictogram
- Includes P symbol, area name and distance

ID2 - Car Park Identification

Identify parking areas Inform visitors of car park regulatory advice eg time limit, fines and responsibilities

Typical Location Car park entrance

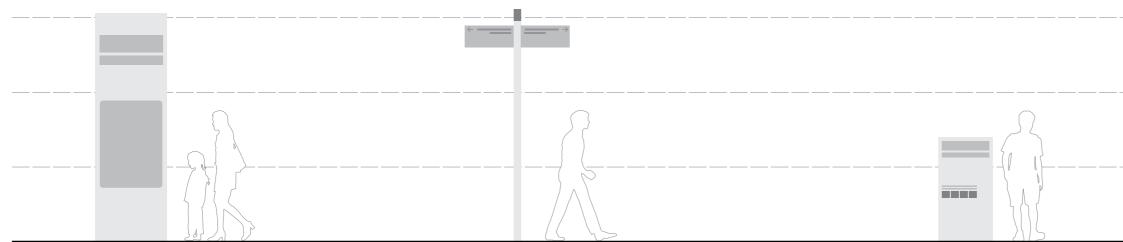
Description

– Freestanding

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 	 	 	 5000mm
 	 	 	 4000mm
 	 	 	 3000mm
 	 	 	 2000mm
 	 	 	 <u>1000mm</u>
			FFI

The Schematic Sign Family is intended to show the range of sign types that will be required based on their Wayfinding function. It does not demonstrate the design of the signs.





IF1 - Information Map Sign Provide orientation, direction, regulatory and safety.

Typical Location

Locate on pedestrian pathways at major arrival and gathering points

Description

- Double sided. Map on one side, digital screen on the other
- Identifies precinct
- Local and surrounding area mapping
- Destination information
- Digital content managed by PSC
- Heavy duty outdoor screen
- Power, data or 4G connection

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DR2 - Pedestrian Direction

To direct pedestrians to destinations.

Typical Location

At key decision points within a precinct.

Description

- Destination name
- Directional information, pictograms and walking time



Typical Location At key destinations within a precinct.

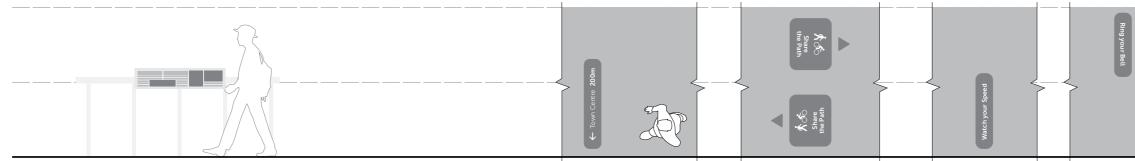
Description

- Destination name
- Behavioural advice
- Possible interpretation about the site

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 5000mm
 4000mm
 3000mm
2000mm
 1000mm
FFL

The Schematic Sign Family is intended to show the range of sign types that will be required based on their Wayfinding function. It does not demonstrate the design of the signs.





IN1 - Interpretive Signage

Interpretive stories about Nelson Bay

Typical Location

Interpretive locations throughout the site. Integrate with urban elements such as ballustrades and seating.

Description

- Design is highly specific to location and content
- Design guide for materials and graphic standards
- Link to digital content
- Local area knowledge
- Historical, cultural, ecological stories and themes

Pathway Ground Markings

Behavioural and directional information

Typical Location

Placed on the ground of shared bike and pedestrian pathway.

Description

- Intended to minimise conflict between pathway users
- Directions to significant locations
- Supported by the MUTCD cycle signage

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		 4000mm
		 3000mm
		2000mm
-	Keep Left	 1000mm
	Ŷ	FFL

Accessibility

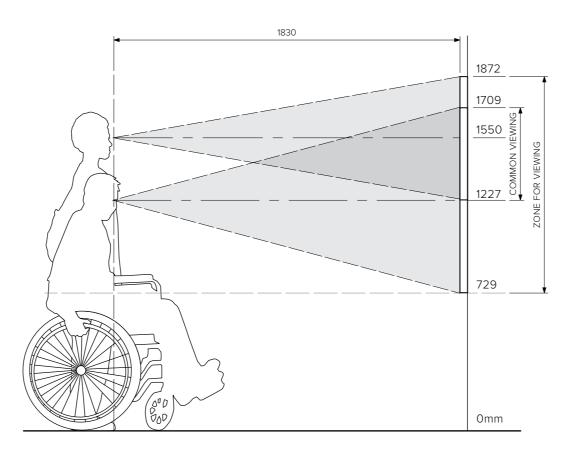
Clear communication of wayfinding information should be inviting, accessible and legible to all user groups, including those with a disability.

This can be achieved through applying Australian accessibility standards and the following strategies to address the needs of all visitors:

- Minimum 30% luminance/colour contrast values between base colour, text and pictograms
- Highly legible font for wayfinding
- Appropriate text sizes for required reading distances
- Functional pictograms to support text messages
- Clear and consistent message layouts/graphic zones
- Appropriate sign placement for optimum viewing
- Braille and tactile graphics where mandated

All signage for Nelson Bay will be designed to meet Australian Standard 1428.1 & 1428.2 Design for Access and Mobility (Parts 1 and 2) and the Disability Discrimination Act (Access to Premises) in regards to sign placement, letter heights and luminance contrast.

If there are other specific requirements based on Port Stephens Council's accessibility policies, please advise us as part of the response to this report.



AS1428.2-1992 - Figure 30 Zones for viewing and for common viewing



Required v distance (r
2m
4m
6m
8m
12m
15m
25m
35m
40m
50m

Minimum 30% Iuminance contrast

viewing m)	Minimum height of letters (mm) (cap X-height)
	6mm
	12mm
	20mm
	25mm
	40mm
	50mm
	80mm
	100mm
	130mm
	150mm

AS1428.2-1992 - Table 3

Height of letters for varying required viewing distances

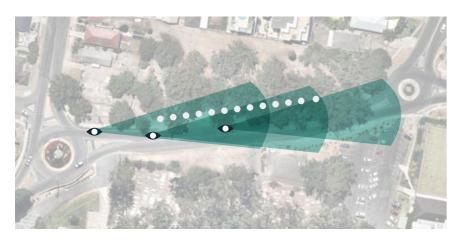
Major Gateway

The signage element at the gateway park on Stockton Street should clearly announce Nelson Bay to passing motorists. The signage element should integrate into the park landscape coordinating with elements such as retaining walls, planting and other structures. Ideally it creates a strong street presence during the day and night and does not present a visual barrier into the park.

As drivers pass the wide park frontage, there is potential to use a linear sequence of repeating elements along the frontage rather than one single large element.

The gateway can be either a public art element or a signage element or an integration of both. These options are considered in this section.





Potential for linear sequence of repeating elements that creates a memorable arrival experience.





Grand scale Melbourne Gateway - repeated urban markers create a linear arrival experience.



Nelson Mandella Monument in South Africa uses a composition of sculptured posts to create a photographic quality image when seen from a specific viewpoint.



Major Gateway

The integration of signage to announce Nelson Bay can build on the notion of the repeated sequence of elements.

It could use recycled local wharf timbers and incorporate illumination and reflective elements for night time activation.

We see this as a unique town gateway statement that does not need to coordinate with the Port Stephens signage suite by Danthonia.





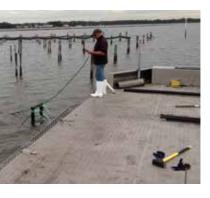








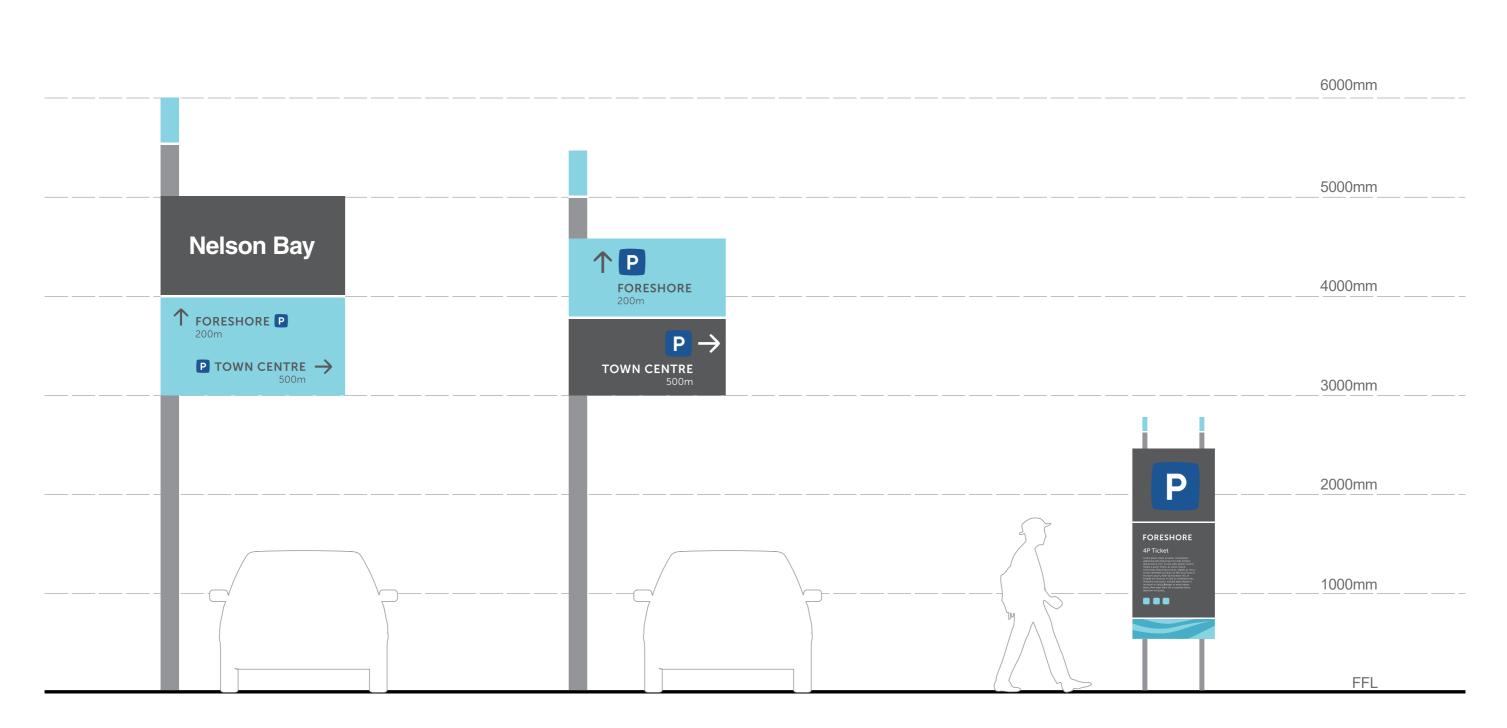




Vehicular Directional Signs

The vehicle directional sign directs to public Car Parks around the Town Centre and is readable from a moving vehicle. It nominates precinct car parks and distance to travel.

The car park identification is a freestanding non illuminated sign and should clearly announce the public car park upon approach from both directions. Upon entry, general advice, such as time limits, owner responsibilities and applicable fines are to be provided. This content should be prepared by Council.



Information Map Sign

This sign is intended to provide a clear diagrammatic map overview of the Town Centre with connections to other areas. It should highlight the important public destinations and encourage exploration and circulation around the Town Centre.

Refer to the map design page.

This reverse side of this sign will incorporate the digital information screen. The sign is intended to provide up to date information and promotion of ongoing Council events and services. It requires, power, data or 4G connection.

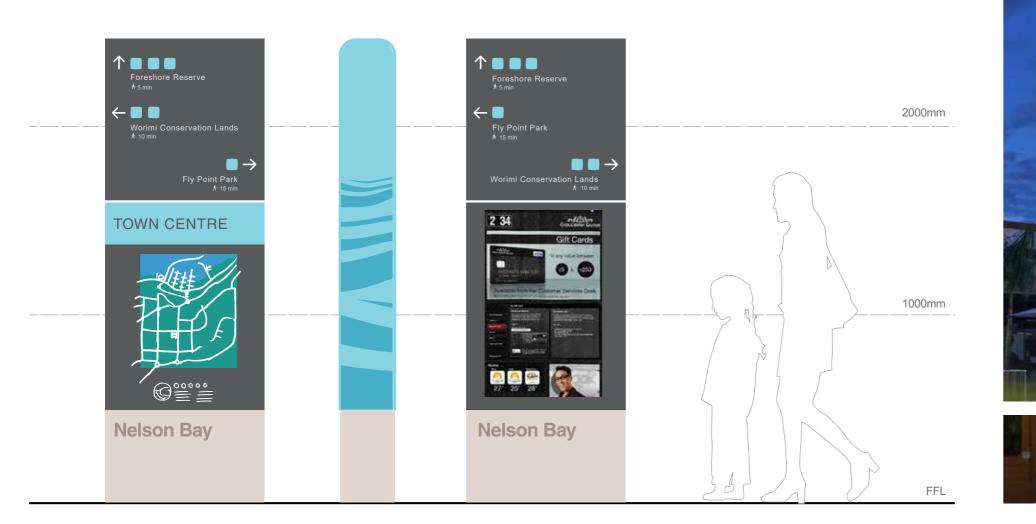
It will require technical advice as to the feasibility of this element in a coastal location.

Information map signs may include opportunities for sponsored community projects to be incorporated in the design.

Sign base to be clad in sandstone.

The sides of the sign may incorporate visual texture and pattern through the works of local artists or elements from the Port Stephens branding guidelines.

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Mapping Strategy

We propose two types of map to be used for pedestrian circulation and exploration.

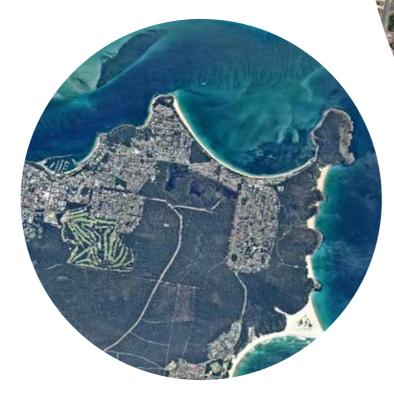
1. Town Centre Map

This is the primary map. The immediate Town Centre is mapped showing key public destinations, streets, parks, foreshore, information centre, police, health services, 'you are here' location, walking distances and other information.

2. Context Map

The context map is a simpler map that shows areas beyond the town centre and promotes exploration around Nelson Bay and into Shoal Bay. For instance any achievable walks can be highlighted and supported with typical travel times and degrees of difficulty such as the Lighthouse Walk and Gan Gan Walk.

The maps design be clearly legible and provide information to support all visitors. The map may also contain contact details for assistance and link to other digital services such as a downloadable map in multiple languages.





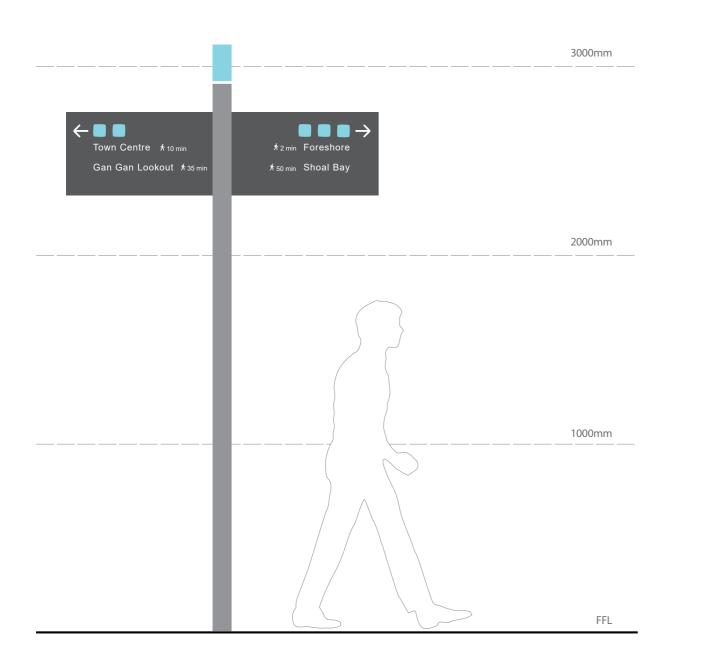
Mapping Exemplars



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Pedestrian Directional Sign

This sign type directs to the main destinations and precincts shown on the Town Centre map incorporating pictograms and walking times. This is intended as a freestanding sign type, however there may circumstances where the sign panel is wall mounted or fixed to an existing pole.





This sign type names a public space such as parks or coastal walkways. It should announce the site at major arrival points as well as provide any pedestrian behavioural advice (in a positive tone). It may also incorporate specific interpretation about the site. There may be variations in scale or use of materials for this sign type dependent upon the type of environment.







Interpretation

There is an opportunity to express themes and stories about Nelson Bay through interpretation elements that are integrated into the built environment and landscape. These themes and stories can explore all aspects of the history and culture of the town as well as the diverse ecology of the ocean and land environments.

Interpretation may be didactic. That is, it provides simple objective facts and information about a place, past events, or ecologies that raise awareness. Information is absorbed by reading and may promote specific actions or behaviours, such as encouraging the preservation of the natural environment. Or it may be impressionistic, such as a landmark public artwork that celebrates site specific themes in a prominent location. People may interact with these elements to fully experience them.

Or interpretation may be both didactic and impressionistic providing both information, emotional connections and create curiosity through texts, images, forms, shapes, materials and lighting that fully engage the senses.

All forms of interpretation are appropriate to Nelson Bay and they all contribute to a richer and more memorable visitor experience.



	• 11
Requires consultation, research and writing	С
– Signs	_
- Information	_
– Facts	_
– Stories	

Impressionistic

Community consultation, commissioning artists

- Site specific artworks
- Patterns / textures in environment
- Collaboration within design disciplines

Stories and Themes

The stories and themes should be authentic and valued by the whole Nelson Bay community.

History and Culture

These themes should explore the indigenous stories, and the stories that formed the character and culture of Nelson Bay.

Industries such as oyster farming and other maritime themes around shipping and fishing can be explored.

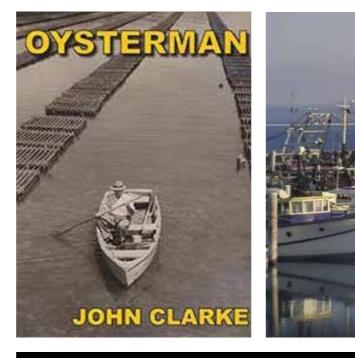
Ecology

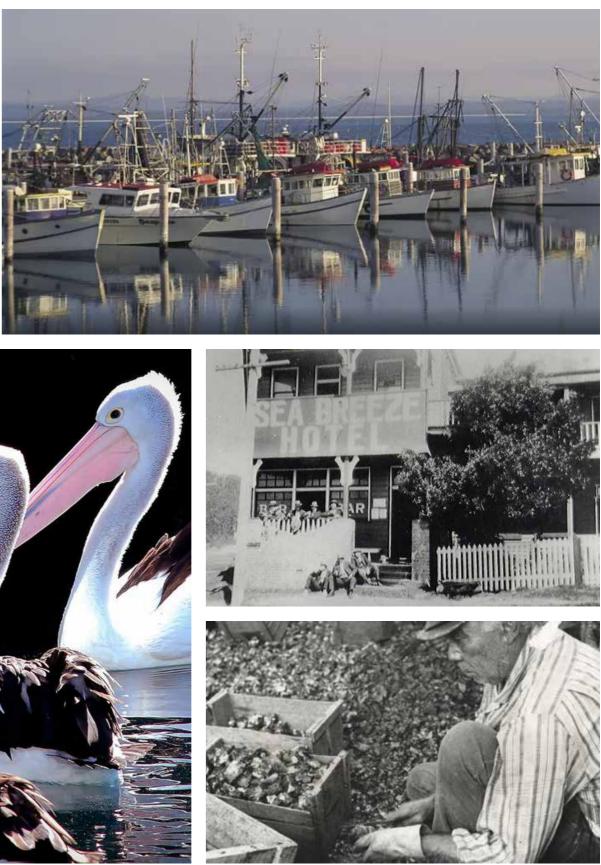
Marine ecology and the natural landscape provide abundant sources of material for people to discover as they move around Nelson Bay. They provide explanations about the immediate environment and also can describe what is hidden from view.

Next Steps

Port Stephens Council should determine key themes and stories to be expressed based on research and consultation with appropriate groups and community representatives.

An interpretation strategy should be developed that considers how these themes and stories are planned and integrated within the Nelson Bay environment.







Intergrated into Structures

- Coordinate with landscape and architectural elements
- Located at key waiting and gathering points
- Integrate into seating





Located at key waiting and viewing points

Freestanding and projecting

- Freestanding structures projecting from handrails and walls

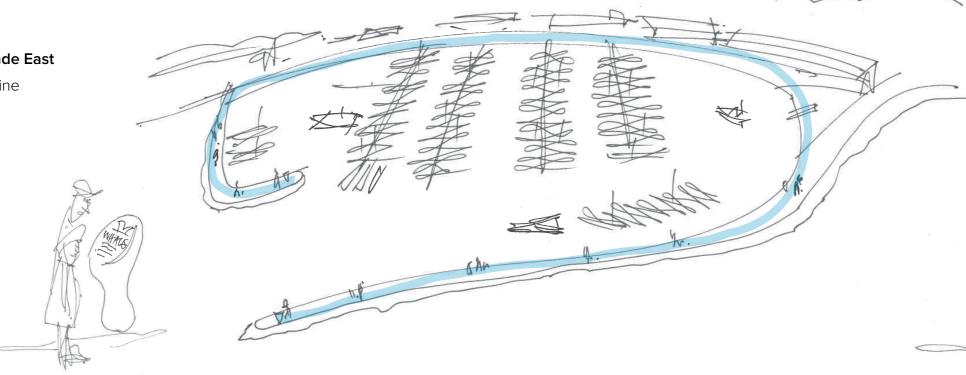




Consider the whole Waterfront Promenade as an interpretive walk.

Waterfront Promenade East

Interpretes local marine ecology themes.

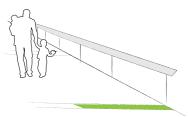




Embedded into ground plane

– Linear visual narrative along boardwalk

– Can assist pedestrian movement through site



Waterfront Promenade West

Interpretes local commercial marine industry themes.



