# Architectural Drawings

Sheet No.	Sheet Name
DA000	Cover Sheet
DA001	Existing & Demolition - Site Plan
DA101	Site Plan
DA161	Stage 1 Works
DA162	Stage 2 Works
DA201	Ground Level Plan
DA202	Roof Plan
DA401	Elevations
DA501	Sections
DA900	Signage Details
DA920	3D View - Height Limit Demonstration
DA950	Shadow Diagrams
DA960	Materiality
DA970	Photomontages
DA971	Photomontages

Current Revision



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# Port Macquarie Aquatic Facility LOT: 2 DP: 808449, Munster Street

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CO.OP STUDIO Suite 406, 46 Kippax Street, Surry Hills NSW 2010 Office: +61 404 803 783 Sydney@co-opstudio.com.au PROJECT Port Macquarie Aquatic Facility PROJECT NUMBER 100269

Cover Sheet

DRAWING NO. REVISION



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ANY DAMAGE TO AREAS OF THE WORKS TO REMAIN SHALL BE MADE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT AT THE CONTRACTORS EXPENSE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION REQUIRED TO SATISFACTORILY ACHIEVE THE NEW WOKS AND DESIGN INTENT OF THE CONTRACT DOCUMENTS.

ALL DEMOLITION ITEMS MUST BE REMOVED FROM SITE AND DISPOSED OF LEGALLY UNLESS NOTED OTHERWISE.

COMPLETELY REMOVE AND DISCARD REDUNDANT SERVICES OR CAP SERVICES TO BE REUSED IN NEW WORKS.

FOR TREE REMOVAL - REFER TO LANDSCAPE TREE REMOVAL PLAN AND ARBORIST REPORT.

# LEGEND

---- EXTENT OF DEMOLITION WORKS.

EXISTING BUILDING/ STRUCTURE

SCALE DRAWING As indicated @ A1 Existing & Demolition - Site Plan DRAWING NO REVISION **DA001** С



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LEGEND



RETAINED TREE

PROPOSED TREE



PROPOSED LAWN

EXISTING LAWN



PROPOSED NATIVE PLANTING

EXISTING BUILDING / STRUCTURE

 $\longrightarrow$ 

SITE BOUNDARY

、」」 CONCOURSE LIGHT POLE

> CAR PARK FLOOR MARKING - DIRECTION ARROW

As indicated @ A1





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 $\square$ 

DEVELOPMENT APPLICATION DEVELOPMENT APPLICATION 80% Concept For Coordination For Coordination

**REV DESCRIPTION** 





LEGEND



STAGE 1a WORK INCLUDING HIGH IMPACT LANDSCAPE

MEDIUM IMPACT LANDSCAPE



LOW IMPACT LANDSCAPE

STAGE 1b WORKS

/e	shown	
b)		

Port Macquarie Aquatic Facility PROJECT NUMBER 100269

SCALE DRAWING Stage 1 Works DRAWING NO. DA161 1 : 500 @ A1





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LEGEND



STAGE 2 WORKS

-ADDITIONAL PLANT AS PART OF **STAGE 2 WORKS** 

-ROOF ABOVE SHOWN DASHED

-FACADE LINE AS PART OF STAGE 2 WORKS. -GYM FITOUT AS PART OF STAGE 2 WORKS

-ROOF & SLAB STAGE 2 AREA 200M2

Port Macquarie Aquatic

SCALE DRAWING Stage 2 Works DRAWING NO. DA162 1 : 500 @ A1









# MATERIAL LEGEND

CON 01	CONCRETE - EXPOSED AGGREGATE
CON 02	CONCRETE FINISH
FS 01	METAL CLADDING COLOUR: OFF-WHITE
FS 02	TIMBER CLADDING COLOUR: NATURAL FINISH
FS 03	INSULATED METAL METAL PANEL COLOUR: OFF WHITE
FS 04	METAL SHADE COLOUR: OFF WHITE
FS 05	SHADE CLOTH COLOUR: NATURAL
GLS 01	GLAZING
MTL 01	METAL ACOUSTIC LOUVRE SCREEN COLOUR: OFF WHITE
MTL 02	TENSILE MESH COLOUR: NATURAL
MTL 03	METAL LOUVRE SCREEN COLOUR: BLACK
MTL 04	METAL LOUVRE SCREEN COLOUR: NATURAL
MTL 05	WINDOW / DOOR METALWORK COLOUR: NATURAL ANODISED
PT 01	PAINT COLOUR: OFF WHITE
RF	METAL ROOF SHEET



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2 Section through Pods 1:200

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PRELIMINARY









PROJECT Port Macquarie Aquatic Facility

SCALE DRAWING Sections DRAWING NO. **DA501** 

1 : 200 @ A1

REVISION Ε

		I
PROGRAM POOL	GYM EXPANSION	
		$\gtrsim$

ADMIN	PROGRAM ROOM	GYM	



DA SIGNAGE - KEY PLAN







2 DA SIGNAGE - TOTEM DA900 1:50

3 DA SIGNAGE - GORDON STREET DA900 1:50

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PROJECT

# Port Macquarie Aquatic Facility

PROJECT NUMBER

100269

DRAWING

# Signage Details

SCALE

REVISION

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DA900A

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Port Macquarie Aquatic Facility

3D View - Height Limit Bemonstration DA920







As indicated @ A1



# LEGEND



SHADOW CREATED BY PORTION OF WATER SLIDE OVER HEIGHT LIMIT







PERFORATED METAL WIND BARRIER



**TENSILE MESH FENCING** 

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STANDING SEAM METAL ROOF



COBBLED PAVING



**EXPOSED AGGREGATE TO PRECAST** 



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# **CEMENT RENDER**

Port Macquarie Aquatic

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1 : 1 @ A1





ENTRY APPROACH



# **COVERED SEATING**

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SOUTH FACADE



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@ A1





**GORDON STREET ENTRY** 



# PLANT BUILDING

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**GRANDSTAND & 50M POOL CONCOURSE** 



**AQUATIC PLAY** 



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Port Macquarie Aquatic

SCALE DRAWING Photomontages DRAWING NO. DA971







Landscape Concept Plan Report - 100% Package for DA





# PORT MACQUARIE HASTING COUNCIL PORT MACQUARIE AQUATIC FACILITY

\$20 - 0065 ssue F • 29/07/2024 -

We acknowledge the Birpai people, the traditional owners of the land in which we work and live, and pay our respects to Elders past, present and emerging.We extend our respect to all Aboriginal and Torres Strait Islander people who choose to call Port Macquarie Hastings home.





# PORT MACQUARIE AQUATIC FACILITY LANDSCAPE CONCEPT PLAN REPORT

### Client: Port Macquarie Hasting Coucnil



Prepared by



**CLOUSTON Associates- a division of Beveridge Williams** Landscape Architects • Urban Designers • Landscape Planners 65-69 Kent Street • Sydney NSW 2000 PO Box R1388 • Royal Exchange NSW 1225 • Australia Telephone +61 2 8272 4999 Contact: Crosbie Lorimer Email • sydney@clouston.com.au Web • www.clouston.com.au

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	S20-0065	В	28/07/2023	80% DRAFT	BH	FH	
	S20-0065	С	30/08/2023	UPDATED 80%	BH	FH	
	S20-0065	D	20/09/2023	100% for DA	BH	FH	FH
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4	S20-0065	F	29/07/2024	RFI updates	BH	FH	FH 🖌
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# **PROJECT BACKGROUND**



Figure 1. Site Aerial and Site Boundary

# INTRODUCTION

Port Macquarie - Hastings Council is located on the Mid North Coast of New South Wales, 393 km north of Sydney and 544km south of Brisbane. Port Macquarie is a popular tourism destination for holidaying located on the Hastings and Camden Haven Rivers that stretch from stunning beaches to the Great Dividing Range hinterland.

Other townships within the municipality include Wauchope (major inland township considered the gateway to 40,000 ha of National Parks and State Forests), Dungbogan, Kendall, Kew, Laurieton, North Haven and West Haven.

### PROJECT BACKGROUND

There has been a long history of investigations and community consultations into the future of the Port Macquarie Olympic Pool and the development of a new generation, modern aquatic and leisure centre.

Port Macquarie has undergone unprecedented growth with its population forecast to reach more than 100,000 by 2030. Increases in both the number of residents and visitors to the region has resulted in user congestion at the current Port Macquarie Pool facility during peak periods.

This project has been a long-standing item for Council and has been discussed with the community on several occasions over the past 20 years with expectations set around the delivery of a new pool facility within Port Macquarie. Previous engagement with the community and messaging from Council around the development or upgrade of the Port Macquarie Pool was undertaken in 2000, 2005, 2011 and 2017. In 2017, the project was listed as a priority within Council's 2017 - 2025 Recreation Action Plan.

In November 2017, community engagement was undertaken via a community survey to understand the elements and priorities the community would like to see included in a new aquatic facility.

### PREVIOUS STUDIES

In May 2018 Council commissioned Otium Planning Group, a specialist consultancy service with expertise in aquatic facility development and management, who commenced a review of the regions current aguatic facilities to develop a Strategy for the Port Macquarie - Hastings regions aquatic requirements. In developing this Strategy, Otium have identified and recommended the key components needed to meet the aquatic needs of the community for the next 50 years.

### ANALYSIS OF RELEVANT STRATEGIES AND PLANNING REPORTS

a. Port Macquarie Hastings Council - Aquatics Facilities Strategy (Otium - Draft Strategy Report): This strategy is a blueprint for delivering high quality and economically sustainable facilities which respond to current and future demand whilst also fulfilling community expectations of providing accessible swimming facilities to local communities. The project objectives were:

- Determine the overall number of aquatic facilities required to meet Port Macquarie- Hastings population of 103,993 by 2036;
- Outline future aquatic development (new or upgrade), including a breakdown of facility components, programming, concept plan and estimates;
- Outline the financial implications of the proposed developments over the short to long term.

b. Vegetation Management Plan - State Environment Planning Policy (Coastal Management) 2018: Identifies the vegetation communities on site not to be disturbed.

### c. Development Control Plan (DCP) 2013:

Supporting document to the Local Environmental Plan (LEP). This plan provides detailed guidance for the design considerations, general standards and area-based provisions related to development.

### d. Local Strategic Planning Statement:

"Shaping Our Future 2040" is the core strategic land-use planning document for the whole of Port Macquarie-Hastings Local Government Area (LGA). It outlines the 20-Year vision for land-use planning in our local area and sets the direction for our community's environmental, social, and economic land-use needs.

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# CONNECTING WITH COUNTRY

# START WITH COUNTRY



Figure 1: NSW State Government Connecting with Country Guiding documents

"Through our projects, we commit to helping support the health and wellbeing of Country by valuing, respecting, and being guided by Aboriginal people, who know that if we care for Country – it will care for us."

## - GANSW,2020

# **DESIGNING WITH COUNTRY GUIDELINES**

Imagining with Country **Design** 

FORM The design process imagining with Country - is explored further in Section 4 of this guide. Imagining with Country involves interpreting cultural narratives and understanding of Country. It is a key component of designing with Country and includes conversations with Aboriginal community about the history, needs and purpose of a place.

Activity	Action	Why it is important
Design basics	Start with the First Nations map <sup>13</sup>	To understand how relationships between neighbouring nations will influence collaboration and design outcomes.
	Use first placenames	To better understand what they reveal about Country, and guide design responses.
	Connect to broader landscape settings	To understand the site within its context, including how it relates to the broader cultural landscape and wider ecosystem.
	Protect Aboriginal cultural heritage	To protect important connections between items and places, and to landscape settings, and maintain their relationship with the overarching cultural narrative.
	Acknowledge shared history	To find common ground, and support reflection and healing based on a deeper understanding of how Aboriginal and colonial history have influenced each other.
Design opportunities	Learning from traditional Aboriginal architecture	To learn from the ingenuity, creativity and connection with Country embodied in the design of traditional structures.
	Supporting living systems: Earth, Water and Sky	To acknowledge the role of culture in caring for Country, improve the environmental sustainability of built environments, and protect and restore natural systems.
	Reawakening memory	To incorporate storytelling and knowledge of the past so it can enrich the design of places.
	Explore in-between spaces	To respect and draw inspiration from different cultural perceptions of relationships between spaces.
	Indirect connections	To understand how connection can be established through subtle features such as sightlines or elements prompting reflection and memory.
Design considerations	Consider designing with Country at multiple scales.	To connect to the broader cultural landscape through a Country-centred approach.

# THIS IS BIRPAI LAND

The Birpai people are the traditional custodians of Port Macquarie, they relied on the sea and the land to provide much of their food sustenance for life.

The country was created during The Dreaming when the Ancestral Beings wandered, forming the rivers, mountains, plants, animals and other natural features. The Dreaming is a powerful life force that connects Aboriginal people to the land and to a complex system of spiritual beliefs and cultural practices.

## DOORAGAN, MOORAGAN, AND BOORAGAN - THREE MOUNTAINS

Dooragan, Mooragan, Booragan – Three Brothers Mountains, https://www.nma.gov.au/ exhibitions/endeavour-voyage/dooragan-mooragan-booragan-three-brothers

The story of Dooragan, Mooragan, and Booragan, also known as the Three Brothers Mountains, is a significant Aboriginal Dreaming story of the Birpai people. Three warrior brothers transformed into mountains after battling an evil creature called Warrina to protect their lands. Dooragan became the tallest mountain, Mooragan stood beside him, and Booragan formed the smallest mountain.

These mountains, located in Dooragan National Park, serve as sacred sites, symbolizing bravery, sacrifice, and providing spiritual protection to the Birpai people. The story reflects the deep connection between the Birpai people and their ancestral lands in the Port Macquarie region.

### IMPORTANCE TO PLACE MAKING

The Birpai people, with their rich history and vibrant culture, possess importance and significance in the design of Port Macquarie's public realm and on projects such as the Port Macquarie Aquatic Centre. Their presence provides a unique avenue for the integration of design, cultural interpretation, and the establishment of meaningful connections between the community and the natural and cultural landscapes that surround them.



Figure 2: Dooragan, Mooragan, and Booragan - Three Mountains

# SUB-REGIONAL CONTEXT



Figure 3. Regional Context

### SUB-REGIONAL CONTEXT

On a sub-regional scale the A1 Pacific Highway is within 10km to the west of the site. From the A1 Pacific Highway the B56 Oxley Highway extends towards Port Macquarie CBD where it becomes Gordon Street that runs past the northern boundary of the site. The local Port Macquarie Airport is also within 5km.

The site is situated next to the Wrights Creek (3rd Order) which provides an important recreation corridor. It would help link the Aquatice Centre to the boarder environment.

Important centres close to the new Port Macquarie Aquatic Facility are the Sea Acres Rainforest Centre and the Koala Hospital.

The current recreation and sporting facilities around Port Macquarie include:

- Port Macquarie Regional Stadium
- Port Macquarie Indoor Sports Stadium
- Port Macquarie Olympic Pool

The site is ideally situated to form an important attraction / destination point. It has the potential to link into the wider green open space network as well as the local cycle and walking trails.





Figure 4. Sub-Regional Context Plan

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# LOCAL CONTEXT



Figure 5. Local Regional Context Plan

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The site is currently accessed by two vehicle modes:

- Public Transport There is a bus stop on Gordon Street that lies directly to the north of the site;
- Private Transport 90% of visitors arrive at the site by private vehicle.
- The swimming facilities at Port Macquarie Olympic Pool serve the immediate Port Macquarie catchment. Both Port Macquarie Public School and the Hastings Secondary College are withing 800m (10min walk) from
- The new Port Macquarie Aquatic Centre site is situated in a very strategic position and will help with the reinforcement of the surrounding green grid network (Kooloonbung creek and Nature Reserve + Macquarie Nature Reserve in Wrights Creek) for passive recreational users.
- It is also very important to tie into the existing coastal walk masterplan and the bicycle network to create further opportunities. One of those opportunities is to propose a continuous 'loop track' for cyclists and pedestrians from Oxley Beach Reserve to Wrights Creek and the Hastings River with the new Port Macquarie Aquatic Centre as a key attraction / destination point. This 'loop track' will have secondary arteries hat connect to wider routes and destinations. Refer to the map on the left for the
- The provision of recreational facilities on this site will also benefit all age groups within Port Macquarie.

- **Bus Stops**
- • 🚳 • Cycle loop around site
  - **Existing Shared Path**
  - Proposed Shared Path
  - Main Road
  - Site Boundary
- - - Distance from site; 400m = 5min walk 800m = 10min walk
  - 1200m = 15min walk



# Green Open Space

ISSUE F • 29 JULY 2024

## **BICYCLE NETWORK OPPORTUNITIES**

Cycling for recreation or to get to work, school or uni is a great way to get healthy and help the environment. Council is committed to creating bike lanes and paths for the shared enjoyment of the community. The vision is to create a connected 'loop track' around the CBD that includes the coastal edge and Wrights Creek down to the Hastings River.

The new Port Macquarie Aquatic Facility is situated on this key strategic movement corridor and have the potential to become an attraction / destination point. From the site the opportunity is there to use the green open space networks to propose and create new shared walkways that connects to other important nodes.

There are several areas within the Port Macquarie CBD available for bike parking which includes:

- Port Central South entrance
- Town Green •
- Port Central North Entrance .
- Horton Street at Port Central •
- Clarence Street •

The 'loop track' proposal ties in and strengthens the Bike Plan that aligns with Port Macquarie-Hastings Council's key principles and objectives identified in the Towards 2030 Community Strategic Plan, the Urban Growth Management Strategy and the Transport Strategy.



Figure 6. Port Macquarie Bicycle Network



# PORT MACQUARIE COASTAL WALK MASTER PLAN



Figure 7. Port Macquarie Coastal Walk Master Plan

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## COASTAL WALK MASTER PLAN OPPORTUNITIES

The vision of the Coastal Walk Master Plan is to provide a world class walking track that showcases a magnificent coastline from Westport Park to

Taking the key strategic positioning of the new Port Macquarie Aquatic Facility site in to consideration the opportunity arose to create a new 'loop track' using some of the existing attraction and destination points. The loop track will strengthen the green open space corridor connectedness.

Creating another attraction / destination point on the new Port Macquarie Aquatic Facility site with walkways connecting through the Wrights Creek and Kooloonbung Creek to existing attraction points will enhance the permeability and linkages to other key attraction and destination points.

- A few key objectives will be taken into account as outlined in the 2017
  - Highlight key views through viewing platforms and lookouts
  - To provide well spaced rest stops with public toilets, parking, water
  - bubblers, seating and picnic opportunities
  - To regenerate natural vegetation communities to assist with erosion and restore natural ecosystems
  - To protect and regenerate endangered ecological communities
  - To provide clear trail heads where people can orientate themselves and enter or exit the coastal walk
  - To improve pedestrian links between communities along the path and to the CBD to reduce vehicular pressure on the road network and parking

Provide clear wayfinding and path links to other Walking Trails e.g.

- Googik Track, Kooloonbung Creek Nature Park
- To support and encourage locals and visitors in using the path for health and well being benefits and to improve access to the existing exercise
- To enhance the usability for those with a disability to use the path safely in accessible sections close to the Port Macquarie CBD

# **VEGETATION COMMUNITIES & EXISTING TREES**



# WRIGHTS CREEK RIPARIAN CORRIDOR

A riparian corridor (RC) forms a transition zone between the land, also known as the terrestrial environment, and the river or watercourse (aquatic environment). Riparian corridors perform a range of important environmental functions.

- Maintain or rehabilitate a RC/VRZ with fully structured native vegetation Minimise disturbance and harm to the RC/VRZ
- Treat stormwater run-off before discharging into the RC/VRZ

## **VEGETATION COMMUNITIES**

The existing Coastal Wetlands vegetation community near the development site sets a valuable guideline for the appropriate planting strategy to be employed. This approach not only promotes the preservation of the local ecosystem but also contributes to the overall sustainability of the project, fostering biodiversity, supporting native wildlife habitats, and mitigating potential negative impacts such as Bushfire risk and flooding issue.

# **EXISTING TREES**

The street trees lining Gordon Street are Syzygium australe, exhibiting excellent health and structural ratings. It is imperative to implement protective measures to ensure the preservation of these trees.

The other trees are mainly distributed along the edges of the site, and most of them are in good health, except for a few with an fair health rating. Removal of trees will be considered depends on the proposed development.



Figure 9. Existing Vegetation Communities Plan (SEPP - Coastal Wetlands)

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- Wrights Creek is classified as the 3rd order of Watercourse type with 30m vegetated riparian zone (VRZ) at each side of watercourse. Objectives for riparian corridor management includes but not limits to:
  - Locate services and infrastructure outside of the RC/VRZ

Wrights Creek

State Environmental Planning Policy (SEPP) Coastal Wetlands\*. \*The existing vegetation in this area to remain undisturbed.

Tree protection zone and Structural root zone More details refer to Arborist report

# TREE SCHEDULE AND ARBORIST RECOMMENDATIONS



Figure 10. Existing Trees

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### Legend



Tree protection zone and Structural root zone More details refer to Arborist report

### TREES PROPOSED TO BE REMOVED

No.4, No.10, No.11, No.13 & No. 20.

### **ARBORIST RECOMMENDATIONS**

- Tree 4 was identified as Syzygium australe (Brush Cherry Lilly Pilly) and is located to the east of the existing commercial building on Munster Street. The tree is in fair structural condition due to the presence of a major bark inclusion. Tree 4 is of low Landscape Significance and has been allocated a Retention Value of Consider for Removal.
  - Tree 10 was identified as Lophostemon confertus (Brush Box) and is located to the east of the existing sports fields. As the time of assessment in 2020 the tree was assessed as being in fair health and fair structural condition with a localised crown death and a crown density of 50-75%. It is understood the tree is now dead.
  - Trees 11 and 13 were identified as Schefflera actinophylla (Queensland Umbrella Tree) and are latemature specimens located to the east of the existing sports fields. The trees are in fair structural condition due to the presence of bark inclusion and wounds with advanced stages of decay. Trees 11 and 13 are of low Landscape Significance and have been allocated a Retention Value of Consider for Removal.
  - Consideration should be given to the removal and replacement of Trees 11 and 13 are part of the development works as Schefflera actinophylla (Queensland Umbrella Tree) is listed on Council's Noxious Plant & Undesirable Tree Species List.
  - In addition, Tree 20 Casuarina glauca (Swamp She Oak) is recommended for removal due to its poor structural condition.

Note: Tree detail refer to the following page and Arborist report provide by TreeIQ, Project No: PORTMAC/AQUA/20, Report No: PORTMAC/AQUA/AIA/A.

# TREE SCHEDULE

Tree No.	Species	Height (m)	Radial Crown Spread (m)	DBH comb. (mm)	Health Rating	Structural Rating
1	<i>Tristaniopsis laurina</i> (Water Gum)	5	3	394	Good	Good
2	<i>Tristaniopsis laurina</i> (Water Gum)	5	4	425	Good	Good
3	<i>Tristaniopsis laurina</i> (Water Gum)	6	4	350	Good	Fair
4	<i>Syzygium australe</i> (Brush Cherry Lilly Pilly)	6	4	320	Good	Fair
5	<i>Syzygium australe</i> (Brush Cherry Lilly Pilly)	6	3	300	Good	Good
6	<i>Syzygium australe</i> (Brush Cherry Lilly Pilly)	6	3	250	Good	Good
7	<i>Syzygium australe</i> (Brush Cherry Lilly Pilly)	6	4	302	Good	Good
8	<i>Syzygium australe</i> (Brush Cherry Lilly Pilly)	6	3	300	Good	Good
9	<i>Syzygium australe</i> (Brush Cherry Lilly Pilly)	6	3	280	Good	Good
10	Lophostemon confertus (Brush Box)	11	6	800	D	ead
11	Schefflera actinophylla (Queensland Umbrella Tree)	5	3	401	Good	Fair
12	Lophostemon confertus (Brush Box)	9	6	550	Good	Good
13	Schefflera actinophylla (Queensland Umbrella Tree)	5	2	250	Good	Fair
14	Lophostemon confertus (Brush Box)	5	3	336	Good	Good
15	Lophostemon confertus (Brush Box)	7	3	300	Good	Good
16	Lophostemon confertus (Brush Box)	8	6	475	Good	Good

Tree No.	Species	Height (m)	Radial Crown Spread (m)	DBH comb. (mm)	Health Rating	Structural Rating
17	Lophostemon confertus (Brush Box)	10	5	500	Good	Good
18	Lophostemon confertus (Brush Box)	9	5	500	Good	Good
19	Lophostemon confertus (Brush Box)	8	5	475	Fair	Good
20	Casuarina glauca (Swamp She Oak)	10	6	656	Fair	Poor
21	Casuarina glauca (Swamp She Oak)	10	5	673	Fair	Fair
22	Casuarina glauca (Swamp She Oak)	8	4	375	Good	Fair
23	Casuarina glauca (Swamp She Oak)	9	5	400	Fair	Fair
24	Casuarina glauca (Swamp She Oak)	10	5	500	Good	Good
25	Casuarina glauca (Swamp She Oak)	5	5	230	Fair	Good
26	Casuarina glauca (Swamp She Oak)	11	5	300	Good	Good
27	Casuarina glauca (Swamp She Oak)	11	5	300	Good	Good
28	Casuarina glauca (Swamp She Oak)	12	6	450	Good	Good
29	Casuarina glauca (Swamp She Oak)	12	5	400	Good	Fair
30	Casuarina glauca (Swamp She Oak)	12	6	375	Good	Fair
31	Casuarina glauca (Swamp She Oak)	9	5	375	Good	Good
32	Casuarina glauca (Swamp She Oak)	10	5	500	Fair	Fair

# FLOOD AND BUSHFIRE ZONE



### FLOOD

The development is within a flood zone which requires careful consideration of risks, mitigation strategies. Assessing the potential hazards, implementing flood-resistant design measures, and considering environmental impact are crucial. Emergency planning, and ongoing maintenance are also important factors.

### BUSHFIRE

vegetation.

The presence of riparian vegetation and limited continuity with surrounding forested areas further reduce the size and fuel load of the potentially hazardous vegetation.

The analysis conducted by BEMC confirms that the risk of a bushfire to the proposed development is low that specific bushfire planning and construction requirements are not required in according with PBP 2019. And the landscape plan must demonstrate compliance with the standards outlined in the Bushfire report prepared by BEMC.



Figure 11. Flood extent

The carparking area is within 100 meters of vegetation that poses a bushfire threat, all buildings are situated outside 100m distance from classifiable

Wrights Creek

Flood Planning Area

1:100 Year Flood Extent

Water Bodies

Bushfire prone area

# SITE PHOTOS



Figure 12. Views Location Plan



4 Existing buildings on north-western corner of the site



# SITE PHOTOS



Figure 12. Views Location Plan











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14 Existing amenities building and storage containers on site







# SITE ANALYSIS



- Existing pedestrian crossing is a poor address to the site, as it is close to a busy roundabout
- Existing bus stop sits on the possibile entry of the site, to be relocated
- Commercial and industrial buildings provide unsightly site boundary because of the building wall and random graffiti
- Existing vegetation in good condition to be protected as much as possible
- Existing light poles on site can be reused in the new development
- Existing carpark can act as fire break
- Pedestrian and cycle connection path with limited access to the site
- Wrights Creek (3rd order) provides important landscape corridor for cyclist and connection to the wide Port Macquarie community. Riparian management requirement to be complied.
  - Wrights Creek Coastal wetland vegetation carries the issue of bushfire and flood to the site

Figure 13. Analysis Map



- Existing street trees in good condition to be retained and protected Strong visual linkages but poor public access to the sport field and court
- No universal access to existing amenities building
- Existing tree No. 10 Lophostemon confertus (Brush Box) is dead can be removed
- Existing corridor to Maisie's Cafe, currently being used by customers walking across field
- Flat sport ground with flood issue Existing trees in good condition to be retained and protected
- Office buildings along Grant St
- Existing landscape does not complement the setting and limits functionality for the sport ground
- Back of the existing Netball club building exposed to the site and can add visual connection through access

Existing netball courts limits access into site



GORDON STREET

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	Bus stop location to for a better user exp access	be reconsidered perience and a safer			
N ST JAL IG Y)	Retain existing trees arrival landscape at earthworks to be mi and SRZ zones The grandstanding difference created n land overflow. Lands help guide overland grandstand.	the street interface, nimised inside TPZ location and height night change the scape design to			
hed					
own in I	Tree No. 10 Lophos (Brush Box) is dead				
	300m high difference natural ground and				
	Enhance accessibili levels and pedestria	ty by designing the			
	Ex. gathering space	es to be developed			
ANT ST ERCIAL DING	to incorporate variou activities.	-			
erey)	<ul> <li>Implementation of way-finding signage is key to highlight and emphasize the main entry.</li> </ul>				
	500m high differenc natural ground and				
	1000m high differen natural ground and				
	Recreational landso more canopy opport	ape zone with			
<u>5 GRANT ST</u> OMMERCIAL BUILDING (3 storey)	Connection from ne Netball court to be e	w development to			
	LEGEND				
		andscape zone			
		tional landscape zone Imental landscape zone			
		getated Riparian Zone			
	••••• Pedest	rian circulation			
0	Stratav	ault system			
1	O Indicati	ve tree canopy			
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		1			


# **DESIGN PRINCIPLES**



**ENSURE ACCESS FOR ALL** 

- Ensure universal access to all facilities and connect the • park to its locality
- Connect into wider walking and cycling connections
- Allow for bus and coach pick-up and drop-off space •
- Make wayfinding intuitive ٠



### **PROVIDE A SAFE PLACE**

- Maximise sightlines to vehicle entries •
- Maintain clear sightlines where pedestrians and cyclists • meet vehicles
- Adopt CPTED Principles (ie clear pedestrian sightlines and • adequate night lighting)
- · Restrict vehicle speeds in the site.



## **CREATE A MEMORABLE EXPERIENCE**

- •
- history of the site
- Maintain flexible spaces for multi-use wherever practical • • Provide play that meets needs of all ages



### CONSERVE THE NATURAL ENVIRONMENT

- Conserves and extend existing natural vegetation •
- Enhance the creek corridor edge with recreation • opportunities
- Create linked canopy and ground level corridors for fauna •
- Optimise stormwater quality through WSUD techniques •



### INTEGRATE SUSTAINABILITY

- · Consider carbon positive approaches and in design and material selection
- Maximise canopy cover to provide urban heat island ٠ mitigation
- Apply WSUD techniques
- Minimise built footprint to the least necessary to meet ٠ functional and safety needs.



# LOOK AFTER THE PLACE

- the site
- plants
- Conduct regular safety inspections to ensure a safe environment for visitors and staff

#### **CLOUSTON** associates

Provide user friendly space and facilities Conserve and interpret Connecting with Country and

- Integrate emergency and maintenance vehicle access to
  - Provide irrigation for maintaining the health and vitality of

# LANDSCAPE PRECINCTS INTENT

#### ARRIVAL LANDSCAPE ZONE

The objective of this landscape zone is to create a welcoming and inviting environment for pedestrians, while providing clear wayfinding, a shared entrance path, and engaging experiences for individuals and groups alike. The design should prioritise inclusivity, accessibility, and a sense of community.

Key design objectives include:

- Design wayfinding markers along the pathways to provide clear directions and enhance navigation
- Integrate informal seating areas along the pathways to provide opportunities for individuals and groups to rest, socialize, or simply enjoy the surroundings.
- Integrate lush greenery, and aesthetically pleasing landscape features throughout the zone.
- Incorporate interpretive layer that provides connecting with country context, site history and sport history.

#### RECREATIONAL LANDSCAPE ZONE

The objective of this recreational landscape zone is to create a vibrant and engaging space that promotes active and passive recreational activities, while providing amenities for relaxation, socialization, and physical fitness. The design aims to prioritise user comfort, accessibility, and a seamless pedestrian circulation experience.

Key design objectives include:

- Enhance the site circulation by providing well-defined, accessible pathways that connect with surrounding facilities.
- Designate a sizable open lawn area for passive activities like picnics, yoga, or recreational games. Provide a well-maintained and accessible lawn surface suitable for various activities.
- Offer a mix of seating styles to cater to different preferences, including individual seats, group seating, and more secluded spots for privacy
- Integrate outdoor gym equipment that caters to a variety of fitness levels and preferences.
- Incorporate a variety of native trees and shrubs strategically throughout the landscape zone to provide natural canopy cover.

### ENVIRONMENTAL LANDSCAPE ZONE

The objective of this environment landscape zone is to create a sustainable and resilient space that integrates Water Sensitive Urban Design (WSUD) elements, mitigates flood issues, reduces bushfire risks, and protects and improves the riparian environment. The design should prioritize ecological restoration, biodiversity enhancement, and long-term environmental sustainability.

Key design objectives include:

- Incorporate WSUD elements to help slow down and control the flow of water, reducing the risk of flooding downstream, such as Rain gardens, bio-swales, detention basin, permeable pavements, water harvesting and reuse.
- Create firebreaks and buffer zones by incorporating cleared areas, select fire-resistant native plant species in the landscape design to reduce the spread and intensity of bushfires.
- Enhance and protect the riparian environment by restoring native vegetation along watercourses, rivers, or streams within the landscape zone.



#### Landscape Precincts



Arrival landscape zones Recreational landscape zones Environmental landscape zones





LEGEND

Existing tree to be retained Native trees Native trees Deciduous trees Concrete unit paving Asphalt Exposed aggregate concrete Cobble stone/permeable paving Lawn Mass planting Deco granite paving Timber bench -Sandstone log/wall

Tactiles Bick Rack ш

Pedestrian entrance

1:100 Year flood extent

Bushfire risk zone

30m Third Order Stream

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LEGEND	
	Existing tree to be retained
	Native trees
	Native trees
1 Con	Deciduous trees
	Concrete unit paving
3-7	Asphalt
	Exposed aggregate concrete
	Cobble stone/permeable paving
	Lawn
35.45	Mass planting
	Deco granite paving
	Timber bench
	Sandstone log/wall
m	Tactiles
	Bick Rack
	Pedestrian entrance
	1:100 Year flood extent
	Bushfire risk zone
	30m Third Order Stream

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## **KEY PLAN**

#### LEGEND

Kinh.



40m



# North Elevation 1:400



Client: PORT MACQUARIE HASTING COUNCIL 1:400 @ A3 0 \_ 4 \_ 8 \_ 12 \_ 16 \_ 20

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DETAIL PLAN 01: GORDON STREET FRONTAGE

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**DESIGN INTENT** 



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# **DESIGN INTENT**



Sandstone retaining







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# **DESIGN INTENT**









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Existing tree to be retained Native trees Native trees Deciduous trees Concrete unit paving Asphalt Exposed aggregate concrete Cobble stone/permeable paving Lawn Mass planting Deco granite paving Timber bench Sandstone log/wall Tactiles Bike rack Pedestrian entrance Stormwater provision - A.

REAK 1

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## **DESIGN INTENT**











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# **DESIGN INTENT**









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# LEGEND



Proposed Wayfinding signage location Indicative CwC Interpretation locations

Note: CwC interpretation to be developed with qualified CwC consultants.

# **DESIGN INTENT**



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# **KEY PLAN**







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## ARRIVAL LANDSCAPE ZONE

The arrival landscape zone is a captivating space that seamlessly blends nature's allure with human comfort and connectivity. It features informal seating for quick interaction. Tall and elegant avenue trees line the shared user path, adding beauty and shade. Wayfinding signages ensure easy navigation, while a welcoming landscape view attracts visitors to walk into the site. Together, these elements create a welcoming and engaging environment for all.

## KEY PLAN

















## RECREATIONAL LANDSCAPE ZONE

The recreational landscape zone offers a dynamic and vibrant space for leisure and social activities. It features designated areas for gym equipment, BBQ and seats, providing a delightful spot for people and their friends and families. Passive lawn space provides opportunities for temporary events, with the natural shade provided by trees, it offer relief from the sun and create a comfortable environment. Together, these elements create a versatile and enjoyable landscape zone for recreational pursuits and community engagement.

KEY PLAN



















# ENVIRONMENTAL LANDSCAPE ZONE

The environment landscape zone embodies a commitment to environmental sustainability by incorporating limited infrastructure, native plantings, passive lawn areas, and WSUD techniques. It offers a tranquil and environmentally conscious space that fosters a deep appreciation for the natural world while prioritising its conservation.



















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# MATERIAL SCHEDULE

### **STRATEGY**

The materials palette will echo the architectural character of the development. The hardscape elements will use a mixture of tones and textures, softening the ground plane and complimenting the lush planting that guides pedestrian movement through and into the site.

All furniture and fixtures for the site will

- be durable and functional.
- improve ease of access
- Reflective of a contemporary design character
- Adaptable to the needs of the community
- Low carbon options to be incorporated



Turf Lawn



Softfall within splash pad



Exposed Aggregate Concrete dark & light (Low carbon)





Feature Banding/ Interpretive



Bike rack 1



Concrete Seat with Timber

The second and a second

Sandstone log with interpretive panel



Sandstone logs







BBQ and picnic table





Flex joint mortar, on grade-pedestrian permeable paving





# PLANTING SCHEDULE

## PLANTING SELECTION

The planting selection is inspired by the underlying geology from local native vegetation communities. A high diversity of species will ensure a resilient landscape that exhibits flower and foliage colour throughout the seasons and contributes to a healthy urban ecology.

Key documents include:

- Port Macquarie-Hastings Indigenous Species Landscaping Species List
- State Environmental Planning Policy (Koala Habitat Protection) 2021

#### Note:

Species marked with  $\star$  have less leaf dropping issue, to be used around pool area to minimise the impact of leaf litter.

CODE	BOTANICAL NAME	COMMON NAME	Indicative mature height (metre)	Indicative mature width (metre)	Pot Sizes	Indicative densities (p/m <sup>2</sup> )	TOTALS
TREES / PL	AMS / LARGE FERN						
	Archontophoenix cunninghamiana 🗙	Bangalow Palm	20	5	75Lt		
	Banksia integrifolia	Coast Banksia	10	5	45Lt		
	Brachychiton acerifolius	llawarra Flame Tree	15	5	75Lt		
	Cupaniopsis anacardioides 🕇	Tuckeroo	12	8	45Lt		
	Corymbia maculata	Spotted Gum	20	10	75Lt		
	Cyathea australis 🗙	Rough Tree Fern	5	3	25Lt	As shown on plan	
	Cyathea cooperi ★	Straw Tree Fern	5	3	25Lt		
	Eucalyptus saligna	Sydney Blue Gum	20	10	75Lt		
	Melaleuca quinquenervia	Broad-leaved Paperbark	15	8	75Lt		
	Syzygium australe 🗙	Brush Cherry	8	4	45Lt		
	Howea forsteriana ★	Kentia Palm	10	3	75Lt		
SHRUBS							
	Banksia spinulosa	Hairpin Banksia	2	2	200mm		
	Cordyline rubra	Red-fruited Palm Lily	2	1	200mm		
	Daviesia ulicifolia	Gorse Bitter Pea	2	1	200mm		
	Dillwynia retorta	Twist-leaf Parrot Pea	2	2	200mm	]	
	Hibiscus splendens	Pink Hibiscus	3	2	200mm	]	
	Indigofera australis	Austral Indigo	3	2	200mm	1	
	Kunzea capitata	Purple Kunzea	2	2	200mm	As shown on plan	
	Leptospermum polygalifolium	Tea-tree	3	2	200mm	1	
	Persoonia levis	Broad-leaved Geebung	3	3	200mm		
	Pittosporum revolutum	Rough-fruit Pittosporum	4	3	200mm	1	
	Tabernaemontana pandacaqui	Banana Bush	3	2	200mm	1	
	Westringia fruticosa	Coastal Rosemary	2	2	200mm	1	
						1	
GRASSES /	GROUNDCOVERS / RIPARIAN						
	Alpinia caerulea	Native Ginger					
	Asplenium australasicum	Birds Nest Fern				1	
	Adiantum hispidulum	Rough Maidenhair				1	
	Adiantum formosum	Blackstem				1	
	Cissus antarctica	Kangaroo Vine				1	
	Crinum pedunculatum	Swamp Lily				1	
	Doodia aspera	Rasp Fern	I			1	
	Dicondra repens	Kidney Weed				1	
	Hardenbergia violacea	Hardenbergia				1	
	Hibbertia scandens	Climbing Guinea Flower				1	
	Histiopteris incisa	Bats Wing Fern				As shown on plan	
	Lomandra longifolia	Spiny-headed Mat Rush				1	
	Lomandra 'Tanika'	Lomandra 'Tanika'				1	
	Ficinia nodosa	Knobby Club Rush				1	
	Viola hederacea	Native Violet	1			1	
	Poa labillardier	Tussock Grass				1	
	Dianella revoluta	Blue Flax-Lily				1	
	Pennisetum alopecuroides	Swamp Foxtail Grass				1	
						-	
	Philodendron 'Xanadu'	Philodendron xanadu					
	Philodendron 'Xanadu' Themeda trianda	Philodendron xanadu Kangaroo Grass					

# PLANTING IMAGE PALETTE



Eucalyptus saligna



Cupaniopsis anacardioides



Banksia integrifolia



Indigofera australis





Crinum pedunculatum

Histiopteris incisa



Corymbia maculata



Archontophoenix cunninghamiana



Hibiscus splendens









Cordyline rubra







Hibbertia scandens



Pennisetum alopecuroides





Brachychiton acerifolius



Howea forsteriana

Cyathea cooperi



Leptospermum polygalifolium

Kunzea capitata



Adiantum hispidulum



Westringia fruticosa





Philodendron 'Xanadu'



Lomandra 'Tanika'



Viola hederacea



Dicondra repens



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Projected canopy diameter	Projected canopy area	Required soil volume	
eg 16m	eg 200m <sup>2</sup>	eg 120m <sup>3</sup>	
eg 8m	eg 50m²	eg 30m³	
eg 4m	eg 13m <sup>2</sup>	eg 8m³	



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#### TYPICAL TREE PLANTING DETAIL - MASS PLANTING 1:40@A3

**TYPICAL TREE PLANTING DETAIL - TURF** 1:40@A3



Client: PORT MACQUARIE HASTING COUNCIL AS SHOWN

PORT MACQUARIE AQUATIC FACILITY

TYPICAL DETAILS

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Tree planting. Refer to landscape softworks plan and planting schedule LA06.21. Place in planting hole centre and plumb, with the root ball level with the finish surface of the surrounding soil.

Tree stakes. (3no. per new tree) Refer to specifications.

Spade Edge, Refer Detail A/LA54.01 Turf. Refer Detail C/LA54.01

Min 300mm imported topsoil Type A Refer to Specification.

mported topsoil Type B. Refer to Specification.

Ŵ₩

Cultivate subsoll to a depth of 150mm and additional ripping to 300mm if in cut.

Ø90mm perforated agline. Allow to be free draining & connect to site stormwater.

Cultivate subsoil to a depth of 150mm. Incorporate gypsum and additives as recommended by the approved soil laboratory. Fail towards subsoil drain at min of 1:40. Ensure root ball freely draining. Refer civil documentation and remediation action plan for depth to marker layer and existing subsoil.

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# LANDSCAPE MAINTENANCE SCHEDULE

The Following is a list of landscape maintenance activities proposed	LAWN	Tree Branch Removal:	Paving
for the landscape areas within the development. Maintenance activities	Mowing and Trimming	To AS 4373.	Slip resistar
are based on the NATSPEC landscape specification.	Height: Consistent with the growth habit of the grass variety and	Give notice and engage a suitably qualified 'arborist'.	Test to
	maintained at 25 mm to 40 mm throughout the year.	Diant Danlassementar	Notify
GENERAL	Program: Weekly during the mowing season, November to March,	Plant Replacements:	Rectify
Summary of maintenance responsibilities:	and at bi-weekly intervals during April to October. Do not mow under	General: Replace all evergreen plants that have died or lost 50% of	desigr
Watering of lawn, garden bed areas, pots.	wet conditions.	their normal foliage cover.	Furnitura C
Weeding of lawn, garden bed areas, and pavement.     Supply and areasing of fartilizer to lawn, garden had areas	Baking: Once every month before moving, during the moving	Provide replacement plants as follows:	Furniture, S
<ul> <li>Supply and spreading of fertiliser to lawn, garden bed areas and pots.</li> </ul>	Raking: Once every month before mowing, during the mowing season, with a flexible rake. On alternate mowings, adopt a north-	<ul> <li>Of the same species and variety and of the closest commercially available size.</li> </ul>	Scope: All fi Furniture ar
<ul> <li>Supply and installation of mulch to existing garden bed areas</li> </ul>	south and east-west pattern.	Of uniformly high quality stock equal to the best commercially	Move
and pots.		available.	<ul> <li>Repair</li> </ul>
Pruning, trimming and tree surgery.	Edges: At the same time as mowing, trim lawn edges to plant beds,	Representative of optimum growth for the species as restricted	staff.
Pest and disease control of lawn, shrubs and trees.	pathways, base of trees and	by the container size.	• Signa
Mowing and edge trimming to all lawn areas including collection	other obstacles. Ensure trees and shrubs are not damaged.	• With a balanced root system in relation to the size of the plant	<ul> <li>Play E</li> </ul>
and removal of clippings.		and conducive to successful transpiration. Inspect the root	manag
Replacement of dead or failed plants.	Fertilising	conditions of plants by knocking plants from their containers.	Duin
Maintenance of irrigation systems.	Apply lawn fertiliser as required to maintain healthy grass cover.	<ul> <li>Without signs of having been stressed at any stage during their durable stressed at any stage during their</li> </ul>	Drains
Removal of rubbish and debris in garden areas.		development due to inadequate watering, excessive shade/	General: Ins
Keeping of a log book.	TREES AND SHRUBS Pruning and Trimming	sunlight, suffered physical damage or have restricted habit due	ensure that
<ul> <li>Monthly reports.</li> <li>Maintenance procedures: To accepted horticultural and</li> </ul>	General: Prune to reflect the natural growth flowering and regrowth	to growth in nursery rows.	working ord
arboricultural practice.	habit of the individual species.	<ul> <li>Healthy, well grown, hardened off specimens of good shape and free from pests and disease.</li> </ul>	Frequency:
	Shrubs: Prune after flowering.	<ul> <li>Well rooted and without any indication of having been restricted</li> </ul>	observed at
Weeding	Program: Spring and Summer and on a spot basis as required.	(pot bound) or damaged at any time.	UDServeu a
Weeds: Unwanted broadleaf plants and grasses considered invasive	r rogram. Opring and ournmer and on a spot basis as required.	<ul> <li>Been grown in their final containers for not less than twelve</li> </ul>	IRRIGATIO
to the locality.	Hedge Trimming:	(12) weeks.	Irrigation sy
	Schedule trimming at times which will maintain the character and		The pr
Program:	design of hedges. Allow up to three times per season.	Watering	with re
Lawns: Quarterly and as determined by the relationship of the		Planting: Water as required to maintain growth rates free of stress.	The in
general lawn condition and weed growth.	Tip Pruning:	Turfing: Water to maintain moisture to this depth.	factor
• Trees and Shrubs: As required for planted, paved and mulched	Do not remove buds before the flowering season in those plants that	5	author
areas to be weed free when observed at bi-weekly intervals.	have terminal flowers.	MULCHING	An all
Method:	Purpose: To encourage development of new shoots during the active	Clean up: Remove all mulching materials off lawn or paved areas and	period
Clear and keep clear vigorous ground covers 200 mm from the	growing season.	maintain a clean and tidy appearance when viewed on a weekly basis.	• To co-
base of any shrub or tree:	Method: The removal of the top 25 mm or growing tip of each branch.		agains
Small Areas: By hand.		Depth: Maintain a minimum depth of:	at the
<ul> <li>Large Areas: Proprietary herbicides.</li> </ul>	Radical Pruning:	- 75 mm for organic mulch.	
<ul> <li>Herbicide Application: Avoid windy days or if rain is likely to follow</li> </ul>	Purpose: To maintain a hedge or formal shape or when a particular	- 50 mm for gravel mulch.	Equipment
within 12 hours.	problem, growth habit, damage, or disease requires branch removal.	Top up: Areas of excessive wear.	<ul> <li>Check</li> </ul>
	Clear and keep clear vigorous groundcovers 200mm from the	Appearance: Maintain to keep clean and tidy with no soil disturbance	<ul> <li>Repair</li> </ul>
Pest and disease control:	base of any shrub or tree.	evident on the surface of the mulch.	<ul> <li>Flush</li> </ul>
The landscape contractor is responsible for the control of any	<ul> <li>Use only tools fit for purpose.</li> </ul>		blocka
pest or disease which may affect the lawn and garden bed		INCIDENTAL WORKS	
areas. Actions:	Trees, Prune to:	Supplementary Works	Operation:
• Identify the problem.	• Eliminate diseased or damaged growth, avoid inter-branch	General: Execute the following:	Ensure by a
• Execute the correct treatment until the problem has been	contact and thin out crowns in a natural manner.	Removal of rubbish arising from maintenance work.	operation of
eliminated.	Maintain sight lines to signs and lights.	Removal of leaf litter fortnightly during leaf fall.	<b>•</b> • •
<ul><li>Apply hazardous material out of normal working hours.</li><li>Protect staff and public.</li></ul>	Maintain visibility for personal security.	Wash paving on completion of herbicide application.	Supervision Prevent exc

#### GENERAL

- Watering of lawn, garden bed areas •
- Weeding of lawn, garden bed areas •
- Supply and spreading of fertiliser and pots.
- Supply and installation of mulch to • and pots.
- Pruning, trimming and tree surgery. •
- Pest and disease control of lawn, sh
- Mowing and edge trimming to all law • and removal of clippings.
- Replacement of dead or failed plant •
- Maintenance of irrigation systems. •
- Removal of rubbish and debris in ga
- Keeping of a log book.
- Monthly reports. •
- Maintenance procedures: To ac • arboricultural practice.

#### Weeding

#### Program:

- Lawns: Quarterly and as determined general lawn condition and weed gro
- Trees and Shrubs: As required for pla . areas to be weed free when observe
- Method: •
- Clear and keep clear vigorous group • base of any shrub or tree:
- Small Areas: By hand. •
- Large Areas: Proprietary herbicides. •
- Herbicide Application: Avoid windy da within 12 hours.

#### Pest and disease control:

- The landscape contractor is respon pest or disease which may affect areas. Actions:
- Identify the problem. •
- Execute the correct treatment un • eliminated.
- Apply hazardous material out of nor •
- Protect staff and public. •

#### **CLOUSTON** associates

nce tests:

to AS 4663 annually.

deviation from the design value.

fy the surface and re-test as required to comply with the n value.

Signage, Barriers and Play Equipment

fixed and movable features noted in the record drawings. ind pots:

and relocate as required for maintenance of the area.

ir of replace items damaged by the maintenance contract

ge: Maintain sight line visibility.

Equipment: Inspect on a regular basis and inform building ger of any faults.

spect and clean all drainage structures and pit covers and they are in proper

der.

As required so that all overflow drains are cleared when t fortnightly intervals.

#### ΟN

stem program: To suit the following:

recipitation requirements of the individual zones/stations egard to types of plants.

nfiltration rate of the soil/medium and associated physical rs seasons, evaporation, exposure, topography, local rity restrictions.

lowance for adjustment or shut down during and after ds prolonged heavy rains.

o-ordinate water supply and to confirm watering regime st federal and state government legislation and restrictions time.

maintenance:

all components for proper operation.

r or replace damaged component with equivalent parts. any dirt or foreign matter from the system and clear all ages.

adjustment or replacement of components, that the overall of the system is efficient and operational.

cessive use of water.





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