836

# CITY OF GOLDCOAST.

# AGENDA

# TRANSPORT AND INFRASTRUCTURE COMMITTEE MEETING

# **TUESDAY 10 OCTOBER 2023**

# 1:00PM

City of Gold Coast Council Chambers, 135 Bundall Road Surfers Paradise

#### **ORDER OF BUSINESS**

NOTICE OF THE EIGHT HUNDRED AND THIRTY-SIXTH MEETING OF THE TRANSPORT AND INFRASTRUCTURE COMMITTEE OF THE CITY OF GOLD COAST TO BE HELD AT THE CITY OF GOLD COAST CHAMBERS, 135 BUNDALL ROAD SURFERS PARADISE, ON TUESDAY 10 OCTOBER 2023, COMMENCING AT 1:00PM.

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Chairperson

Mayor

Cr PC Young Cr D Taylor Cr T Tate Cr M Hammel Cr S Curtis Cr W Owen-Jones Cr PJ Young Cr B Patterson Cr H Vorster

Ms C Drinkwater

Director Transport and Infrastructure

## 2 LEAVE OF ABSENCE

## **3 CONFIRMATION OF MINUTES**

That the Minutes of the 835 Transport and Infrastructure Committee Meeting held on 5 September 2023 be confirmed.

# 835

# CITY OF

# **UNCONFIRMED MINUTES**

# TRANSPORT AND INFRASTRUCTURE COMMITTEE MEETING

# **TUESDAY 5 SEPTEMBER 2023**

2:30PM

City of Gold Coast Council Chambers, 135 Bundall Road Surfers Paradise

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# Officer's Recommendation changed by Committee

1 Attendance/Apologies Cr PC Young Chairperson Cr D Taylor Cr M Hammel Cr S Curtis Cr W Owen-Jones Cr PJ Young Cr B Patterson Cr H Vorster Cr G O'Neill Visitor Cr D Gates Visitor Ms C Drinkwater **Director Transport and Infrastructure** Mr J Wagner Manager City Assets Mr L De Lucia Executive Coordinator Stormwater Beaches and Waterways

#### 2 LEAVE OF ABSENCE

Nil.

#### **3 CONFIRMATION OF MINUTES**

COMMITTEE RECOMMENDATION TI23.0905.001

Moved: Cr W Owen-Jones

Seconded: Cr H Vorster

That the Minutes of the 834 Transport and Infrastructure Committee Meeting held on 08 August 2023 be confirmed.

CARRIED

## 4 CONFLICT OF INTEREST DECLARATIONS

Ν	il.	

#### 5 COMMITTEE FORWARD PLANNING SCHEDULE

#### 5.1 TRANSPORT AND INFRASTRUCTURE ACTION LIST & FORWARD PLANNING SCHEDULE A91343590 LG115/1358/01/2021

COMMITTEE RECOMMENDATION TI23.0905.002

Moved: Cr W Owen-Jones

Seconded: Cr H Vorster

That the Transport and Infrastructure Directorate Action List and Forward Planning Schedule (Attachment 1) for the Transport and Infrastructure Committee be noted.

CARRIED

Cr W Owen-Jones left the room at 2:34PM.

Cr W Owen-Jones returned to the room at 2:34PM.

#### 6 **REPORTS AND PRESENTATIONS**

#### 6.1 2022-23 STATE OF THE BEACHES REPORT AND OCEAN BEACHES STRATEGY END OF LIFE REVIEW A90136723 WFB600/420/03/01

COMMITTEE RECOMMENDATION TI23.0905.003

Moved: Cr H Vorster

Seconded: Cr D Taylor

- 1 That Council note the State of the Beaches Report.
- 2 That Council notes the achievements of the Ocean Beaches Strategy and the benefits of having a defined strategy for Ocean Beaches over the period from 2013 to 2023.
- 3 That an approach to future strategic coastal planning and investment be prepared by Officers and returned to Council for consideration.
- 4 That the State of the Beaches Report and a public facing summary of the Ocean Beaches Strategy End of Life Review be published on the City's corporate website.

CARRIED UNANIMOUSLY

#### 6.2 2022-23 LOCAL AREA WORKS PROGRAM - PROJECTS APPROVED UNDER DELEGATION 2074 - FOR NOTATION A90956116 FN334/375/02/12

COMMITTEE RECOMMENDATION TI23.0905.004

Moved: Cr PJ Young

Seconded: Cr H Vorster

That Council notes the Local Area Works projects listed in Attachment 1 have been approved under Delegation 2074 during the 2022-23 financial year, for the period April-June.

CARRIED

Cr M Hammel left the room at 3:35PM. Cr M Hammel returned to the room at 3:37PM.

The meeting adjourned at 3:38PM. The meeting resumed at 3:45PM.

#### 6.3# BIKE SHARE SCHEME UPDATE A89385476 TT138/336/275/02

Changed Recommendation

#### COMMITTEE RECOMMENDATION TI23.0905.005

Moved: Cr H Vorster

Seconded: Cr D Taylor

- 1 That Council notes the contents of the report.
- 2 That Council notes the City Administration's intention, under delegation, to extend the existing Bike Share Scheme contract for two years.
- 3 That the City Administration seek agreement from the operator to undertake the following:
  - a To identify potential parking bays in high profile areas to manage amenity concerns.
  - b To identify additional "no go" and "go slow" zones to better protect vulnerable users
  - c To develop a new Key Performance Indicator (KPI) to relocate idle bikes within low profile suburban areas within three days.
  - d To streamline the way in which the public may report concerns.

CARRIED UNANIMOUSLY

#### Attachments (Tabled)

1 Item 6.3 Bike Share Scheme Update - Presentation

### 7 CLOSED SESSION REPORTS AND PRESENTATIONS

#### 7.1 MINOR LAND ACQUISITION FOR ROAD UPGRADE, PIMPAMA A90104004 RD504624/46/01

#### COMMITTEE RECOMMENDATION TI23.0905.006

Moved: Cr W Owen-Jones

Seconded: Cr H Vorster

- 1 That the report/attachments be deemed non-confidential except for those parts deemed by the Chief Executive Officer to remain confidential in accordance with sections 171 (3) and 200 (4) of the *Local Government Act 2009*.
- 2 That Council notes the content of this report, which identifies the need to acquire land for road purposes over part of the property identified in this report (property) which will facilitate the installation of an upgraded road intersection.
- 3 That Council officers negotiate with the owner of the property to acquire the property by agreement, and if negotiations are successful enter into a contract of purchase on terms satisfactory to the Chief Executive Officer.
- 4 If the acquisition of the property by agreement is unsuccessful, that Council exercise its power to compulsorily acquire the Property by issuing a Notice of Intention to Resume (NIR) under section 7 of the *Acquisition of Land Act 1967*.

It is noted by Council that:

DE02592 will be exercised by the relevant sub-delegated officers to undertake activities under the *Acquisition of Land Act 1967* including hearing objections under section 8 and, if no objections to the NIR are received, to decide whether to make an application to the Minister to take the Property under section 9 of the *Acquisition of Land Act 1967*.

- 5 If there is an objection to the NIR, the report on the objections will be presented to Council to decide whether the NIR should be amended or whether Council should discontinue the resumption or make an application to the Minister to take the Property under section 9 of the *Acquisition of Land Act 1967*.
- 6 That reasonable costs of survey, valuation fees, legal costs, registration, stamp duty and all other fees connected with the acquisition of the Property be at Council's expense.
- 7 The cost associated with the acquisition of the Property will be funded from Capital Expenditure Budget Cl3460C004.

CARRIED

#### **Attachments (Tabled)**

1 Item 7.1 Minor Land Acquisition for Road Upgrade, Pimpama - Report and Attachment - Redacted

#### 7.2 CONSTRUCTION OF UNDERGROUND DRAINAGE NETWORK STAGE 2 AND 3 SHORT STREET AND LAWSON STREET, SOUTHPORT A90589553 LG314/1388/23/002

#### COMMITTEE RECOMMENDATION TI23.0905.007

Moved: Cr W Owen-Jones

Seconded: Cr H Vorster

- 1 That the report/attachments be deemed non-confidential except for those parts deemed by the Director Transport and Infrastructure to remain confidential in accordance with sections 171 (3) and 200 (4) of the *Local Government Act 2009*.
- 2 That Council adopts the Significant Contracting Plan for the Construction of Underground Drainage Network Stage 2 and 3 Short Street and Lawson Street, Southport (Attachment 1).
- 3 That Council amend the City Contracting Plan contract type from General to Significant for LG314/1388/23/002 Construction of Underground Drainage Network Stage 2 and 3 Short Street and Lawson Street, Southport with the contract to be awarded under delegation.

CARRIED

#### **Attachments (Tabled)**

1 Item 7.2 Construction of Underground Drainage Network Stage 2 - Report and Attachment - Redacted

#### 8 GENERAL BUSINESS

Nil.

There being no further business the meeting closed at 3:51PM.

These Pages

Numbered 1 to 8

Constitute The Minutes Of The Meeting

Of The Transport and Infrastructure Committee

Held Tuesday 5 September 2023

# 4 CONFLICT OF INTEREST DECLARATIONS

## 5 COMMITTEE FORWARD PLANNING SCHEDULE

# 5.1★ TRANSPORT AND INFRASTRUCTURE ACTION LIST & FORWARD PLANNING SCHEDULE

Objective ID: A92515379

Author:	Lauren Petersen, Executive Assistant To The Director, Directors Office	
Authoriser:	Cath Drinkwater, Director Transport and Infrastructure, Transport and Infrastructure	
Attachments:	1. Transport and Infrastructure Action List & Forward Planning Schedule	

1 **RECOMMENDATION** 

It is recommended that Council resolves as follows:

That the Transport and Infrastructure Directorate Action List and Forward Planning Schedule (Attachment 1) for the Transport and Infrastructure Committee be noted.

#### TRANSPORT AND INFRASTRUCTURE COMMITTEE

Item	Action Officer	Action/Previous Resolution		
Transport and Infrastructure Committee Meeting (all meetings)				
Action List and Forward Planning Schedule	Director - Transport and Infrastructure	Standing Item.		

eDRMS: #A85875546

837 - Transport and Infrastructure Committee Meeting – 31 October 2023				
Minor Land Acquisition for Road Upgrade, Yatala	Transport & Traffic	To seek Council's approval to acquire land required for a Capital Works Project.		
Our Coastal Future 2024 – 2034	City Assets	To provide a report to Council on the City's 10-year plan for holistic coastal management.		
Traffic Calming Assessment Procedure and Toolkit	Transport & Traffic	To provide Council with the Traffic Calming Assessment Procedure and toolkit		
Pathway User Safety Trial Update	Transport & Traffic	To provide Council with the results of the Pathway User Safety Trial and present pathway devices assessment procedure and toolkit		

838 - Transport and Infrastructure Committee Meeting – 21 November 2023				
State of the Transport Network Report 2023 (Ex. Minute No.TI22.1122.007, TI21.1130.005, TI20.1201.007, G19.1206.007, G18.1207.005, TI18.1129.003)	Transport & Traffic	To provide Council with an update on the State of the Transport Network 2023.		
LG314/690/19/058 Significant contract - Provision of maintenance services for traffic signals (TI19.0502.001)	Transport & Traffic	To seek Council's adoption of the Significant Contracting Plan for the provision of traffic signals maintenance.		

eDRMS: #A85875546

839 - Transport and Infrastructure Committee Meeting – TBC (January 2024)				
Northern Gold Coast Bus Service Improvements Initiative (Ex Minute No. G21.0323.005)	Transport & Traffic	In Part - 5. That an annual update is provided to Council, via the Transport and Infrastructure Committee, on the performance of the Northern Gold Coast Bus Service		
		<ul> <li>Improvement Initiative.</li> <li>That the Northern Gold Coast Bus Service initiative is subject to a review in 2023-24 to anticipate the impacts of the Coomera Connector and new heavy rail station at Hope Island Road on the public</li> </ul>		
Minor Land Acquisition Required for Intersection Upgrade - Pimpama	Transport & Traffic	To seek Council Approval to acquire land required for a Capital Works Project		
Road Network Planning Update	Transport & Traffic	To provide Council with an update on the City Administration's road network planning activities including: • Coomera		
		<ul> <li>Gaven Arterial Road – Binstead Way, Pacific Pines / Maudsland</li> </ul>		
		<ul> <li>Varsity Lakes</li> <li>Christine Avenue, Varsity Lakes / Burleigh Waters</li> </ul>		
		<ul> <li>Pimpama Jacobs Well Road – Depot Road, Pimpama</li> </ul>		

eDRMS: #A85875546

## 6 REPORTS AND PRESENTATIONS

#### 6.1 RESPONSE TO PETITIONS - REVIEW OF TRAFFIC OPERATIONS RESERVE STREET, BURLEIGH HEADS

**Objective ID:** A91423892 File Number: TT1017/113/29/01 Author: Jake Matuzic, Project Manager, Infrastructure Delivery Cath Drinkwater, Director Transport and Infrastructure, Transport Authoriser: and Infrastructure Attachments: **Previous Council Resolutions** 1₽ **2**₽ Petition #2 (June 2023) **3∏** Petition #3 (August 2023)

#### 1 BASIS FOR CONFIDENTIALITY

Not applicable.

#### 2 EXECUTIVE SUMMARY

Not applicable.

#### 3 PURPOSE OF REPORT

The purpose of this report is to respond to two petitions received in relation to the review of traffic operations in Reserve Street, Burleigh Heads.

#### 4 PREVIOUS RESOLUTIONS

Previous Council resolutions relating to this matter are outlined in Attachment 1.

#### 5 DISCUSSION

#### 5.1 Background

In 2021, Council received a petition signed by 101 people with the following proposition:

*"Close Reserve St and join Tabilban St South and North easing the traffic flow through Koala Park in Burleigh Heads."* 

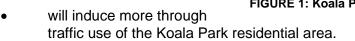
*Koala Park* is the name of a residential estate, first developed in the 1960s, located to the south of the Burleigh Heads activity centre (refer to Figure 1). It is bordered by two state-controlled roads: Gold Coast Highway to the east and West Burleigh Road to the west.

Local motorists use Tabilban Street (west) – Ocean Parade (part) – Reserve Street – Tabilban Street (east) – Ikkina Road (part) as a travel path between these two major roads (refer to Figure 1). For this report, this will be referred to as the "Koala Park route".

The study identified the Koala Park route as essential to the operation of the wider road network and that the petition proposition could not be supported as it:

criteria analysis, and production of a

technical report.



- will reduce local residential amenity.
- will impact the local natural environment.
- will come with a high financial cost that does not provide a value for money outcome for ratepayers.
- does not have the support of the wider community.

The study also identified a suite of concepts to address the safety and amenity premise of the petition for further detailed engineering investigation and investment programming if feasible.

At its ordinary meeting on 21 October 2022, Council resolved (G22.1021.055) to reject the petition proposition and endorsed keeping the status quo with a suite of local road network improvements.

#### 5.2 New petitions

Council has recently received two further petitions relating to the same matter with the same lead petitioner as the 2021 petition (Petition #1). Further information on the two recent petitions is outlined in Table 1 and Attachments 2 and 3.

ltem	Petitioners	Date	Council received resolution	Attachment No.
Petition #2	14	June 2023	G23.0615.065	2
Petition #3	18	August 2023	G23.0822.050	3

#### Table 1: Petition Details

#### 5.3 Response

The premise of petition #2 and #3 are the same as petition #1

- Close Reserve Street to through traffic movements by restricting vehicular access at one end.
- Construct the unformed section of the Tabilban Street road reserve into a formal trafficable road (Tabilban Street Link)

No new information or changes in circumstance have been raised in the new petitions or subsequently identified in recent traffic surveys and city officer investigations, that warrant the



FIGURE 1: Koala Park route

need for Council to amend its resolution relating to petition #1 (G22.1021.055). For completeness, commentary on each item listed in petition #2 and #3 is outlined in Table 2.

It should be noted that considerable City professional resources and effort have been used to deal with the three petitions, including substantial communications with the lead petitioner, which has diverted attention away from other municipal activities. It is proposed that Council accept no further petitions on this matter unless significant new information is presented.

Petition No.	ltem No.	Representation	Commentary	
2	1	<ul> <li>Why was the functional classification of the Koala Park route upgraded from a Collector to a Major Collector?</li> </ul>	<ul> <li>Koala Park route has functioned as a major collector since the residential estate was developed in the 1960s.</li> <li>The functional classification of a road is the role</li> </ul>	
		<ul> <li>Which engineering best practices, guides and standards were applied?</li> </ul>	it performs in the transport network based on its 'movement' and 'place' characteristics as defined by Austroads <sup>1</sup> and many other road agencies and traffic engineering guides across the world.	
			<ul> <li>The functional classification of a road is not defined by the volume of traffic it carries.</li> </ul>	
			<ul> <li>The Koala Park route connects residential streets with higher order arterial roads whilst also providing access to adjacent properties.</li> </ul>	
			• Due to these 'movement' and 'place' characteristics, the Koala Park route is functioning as a major collector within the transport network.	
	2	<ul> <li>How did Council conclude the Reserve Street diversion remains?</li> </ul>	• There is no such thing as a "Reserve Street diversion".	
		<ul> <li>Why was the diversion left out of the study?</li> </ul>	<ul> <li>The Koala Park route, which includes Reserve Street, has been in place since the residential estate was developed in the 1960s.</li> </ul>	
			<ul> <li>Which best practices and national benchmarks were used to allow traffic from a high order road to be</li> </ul>	<ul> <li>Traffic cannot be diverted onto Reserve Street as there is no other route for traffic to be diverted from.</li> </ul>
		diverted into low order only to continue back onto itself?	<ul> <li>Option A identified in the Study was to keep the status quo (Koala Park route) plus local network improvements.</li> </ul>	
			• With regards to Option A, the Study concluded:	
			- positive local community sentiment	
			<ul> <li>balances traffic demand across the road network</li> </ul>	
			- maintains connectivity for local residents	
			<ul> <li>addresses the safety and amenity premise of the petition</li> </ul>	
			- moderate financial cost	

<sup>&</sup>lt;sup>1</sup> Austroads: The apex organisation of road transport and traffic agencies in Australia and New Zealand. It publishes guidelines, codes of practice and research reports that promote best practice for road design, road safety and traffic management (*Wikipedia*, <u>https://en.wikipedia.org/wiki/Austroads</u>, accessed 31 August 2023).

Petition No.	ltem No.	Representation	Commentary
			- no ecological impacts
			<ul> <li>provides a value for money outcome for ratepayers</li> </ul>
	3	The study consultation process was 'tokenistic' <sup>2</sup> and not appropriate for an engineering problem.	• To respond to Petition #1, at its ordinary meeting held on 8 June 2021, Council resolved (G21.0608.006) to undertake a comprehensive traffic study of the Koala Park area including community consultation given the petition proposition had benefits and dis-benefits to the wider Koala Park community.
			The community consultation involved:
			<ul> <li>Fact sheet, social media and online content depicting three options and a series of traffic management questions.</li> </ul>
			<ul> <li>Three information sessions at Tallebudgera Recreation Centre with about 200 people attending.</li> </ul>
			<ul> <li>Online survey with 362 responses of which 94 per cent were Koala Park residents.</li> </ul>
	4	The contents of the Rytenskild Traffic Engineering Report (Report) support the premise of the petition.	• The Report incorrectly references the City's Land Development Guidelines (LDG) as the prescribed standard applicable to the Koala Park route (LDG apply to new developments not existing roads).
			• The Report does not provide a holistic evaluation of all options, rather, concludes that only one option, the closure of Reserve Street and the construction of the Tabilban Street link be implemented (Option B of the Study).
			• The Report provides no assessment of the impacts of Option B on road safety, amenity, environmental impact, road network performance, public cost and constructability.
			The Study identified the following attributes of Option B:
			<ul> <li>not favoured by the broader Koala Park community</li> </ul>
			- will introduce more disbenefits than benefits
			<ul> <li>induce 48 per cent more traffic use of the Koala Park route</li> </ul>
			- \$12 million order of cost

<sup>2</sup> Tokenistic: If an action is tokenistic, the person doing it wants to seem like they are helping a group of people who are treated unfairly in society, but their action is not meant to make lasting changes to how those people are treated (*Cambridge Dictionary*, <u>https://dictionary.cambridge.org/dictionary/english/tokenistic</u>, accessed 4/9/2023).

Petition Item No. No.		Representation	Commentary		
			<ul> <li>requires the clearing of mature trees and vegetation located within the road reserve and the Burleigh Ridge Park (to facilitate earthwork batters) thus impacting on flora and fauna and increasing risk to the local koala population.</li> </ul>		
			• The Report outlines traffic counts carried out in March 2023 indicating Reserve Street is currently carrying in the order of 10,000 to 12,000 vehicles per day (vpd).		
			<ul> <li>A traffic count ordered by City officers in July 2023 indicates traffic volumes on Reserve Street were on average 9,900 vpd.</li> </ul>		
			The Report includes photos depicting 'typical' traffic congestion on Reserve Street.		
			- Site inspections undertaken by City officers on eight occasions in July and August 2023 during weekday AM and PM peak hours and on a Saturday observed no traffic queues on Reserve Street.		
			<ul> <li>It is assumed the Report photos were taken when there were traffic queues as a result of traffic control in place for the pavement renewal works being undertaken in early 2023 however, these queues were not 'typical'.</li> </ul>		
			• The Report introduces no new information that was not otherwise comprehensively assessed by the Koala Park Traffic Study.		
			• The author of the Report did not liaise with City officers as part of the preparation of the Report to obtain any background information and data.		
3	1	During the Council's Transport & Infrastructure Committee Meeting 824 it was recorded in clause 5.5 that the:	Correct.		
		<ul> <li>(i) "function of the Koala Park route is a major collector road within the City's transport network"; and</li> </ul>			
		(ii) "The Koala Park route is performing a major collector road function, not a bypass link, and its current use is applicable to its function".			
	1.2	The western section of Tabilban Street has already undergone full	<ul> <li>Pavement renewal works were recently undertaken along the western section of</li> </ul>		

Petition Item No. No.		Representation	Commentary		
		reconstruction to bring it to current standards.	Tabilban Street as part of City's pavement asset management program.		
			This did not involve a full reconstruction to current standards.		
	1.3	The Reserve Street diversion within the regional urban transport network does not conform to any applicable engineering standards.	Refer to the commentary in Table 2: Petition #2 Item #2.		
	1.4	Local streets should only be available for end of journeys and not regarded as part of the regional	<ul> <li>The Koala Park route functions as a major collector street.</li> </ul>		
		urban transport network.	• A major collector is neither a local access street nor a part of the regional road network.		
	1.5	Council is legally obligated to bring the Koala Park route up to current standards.	• Council has no statutory obligation under the <i>Local Government Act 2009</i> (LGA) or any other statute to upgrade a road.		
			<ul> <li>Section 4 of the LGA outlines the principles of local government which are:</li> </ul>		
			<ul> <li>transparent and effective decision making in the public interest.</li> </ul>		
			<ul> <li>sustainable development and management of infrastructure.</li> </ul>		
			<ul> <li>democratic representation and meaningful community engagement.</li> </ul>		
			- good governance.		
			- ethical and legal behaviour.		
			<ul> <li>In response to petition #1, Council's resolution at its ordinary meeting on 21 October 2022 (G22.1021.055) was made in accordance with these local government principles.</li> </ul>		
			• There are a number of factors that Council consider when deciding whether or not to upgrade a road including its condition, use, safety, cost, value for money and prioritisation with other municipal activities.		
			<ul> <li>Reserve Street carriageway is 7.4 metres wide with no on-street parking lanes which provide two 3.7 metre wide travel lanes.</li> </ul>		
			This exceeds the minimum lane width of 3.5		

Petition No.	ltem No.	Representation	Commentary	
			• The road safety audit undertaken as part of the Study did not identify any deficiencies in Reserve Street inconsistent with its function and use.	
		Demand the upgrade of the entirety	This demand is not supported as it would:	
		of the Koala Park route.	induce more through traffic use.	
			reduce local residential amenity.	
			• impact on the local environment.	
			<ul> <li>come with a high financial cost that does not provide a value for money outcome for ratepayers.</li> </ul>	
			• not have the support of the wider community.	
			<ul> <li>may require property acquisitions along the route including Reserve Street.</li> </ul>	
	1.6	The contents of the Rytenskild Traffic Engineering Report support the premise of the petition.	Refer to the commentary in Table 2: Petition #2 Item #4	

# 6 ALIGNMENT TO THE COUNCIL PLAN, CITY STRATEGIES AND OPERATIONAL PLAN

The contents of this report align with Council's strategic planning as outlined in Table 3.

Document	Details
Council Plan 2022-2027	Connected community
	We provide safe and sustainable travel choices to enable us to move around the city easily.
Gold Coast City	Road and freight network objective
Transport Strategy 2031	To develop and manage an efficient road network that meets the city's needs for the movement of people and goods and can be safely shared by all users.
City Operational Plan 2022-23	Program 2 – City transport.

#### Table 3: Strategic planning alignment

#### 7 FUNDING AND RESOURCING REQUIREMENTS

#### Budget/funding considerations

Not applicable.

#### Costs for capital works and service proposals

Not applicable.

#### **People and culture**

Not applicable.

#### 8 RISK MANAGEMENT

Not applicable.

#### 9 STATUTORY MATTERS

Not applicable.

#### 10 COUNCIL POLICIES

Not applicable.

#### 11 DELEGATIONS

Not applicable.

#### 12 COORDINATION & CONSULTATION

Officers and their respective teams outlined in Table 4 provided input and advice in the development of this report. TABLE 4: Report preparation input

Stakeholder	Directorate	Is the stakeholder satisfied with the report and recommendations
Nick Prasser Executive Coordinator Transport Planning and Policy	Transport and Infrastructure	Yes
Renee Wise A/Executive Coordinator Transport Network Management	Transport and Infrastructure	Yes

#### 13 STAKEHOLDER IMPACTS

Not applicable.

#### 14 BRISBANE 2032 OLYMPIC AND PARALYMPIC GAMES IMPACT

Not applicable.

#### 15 TIMING

Not applicable.

#### 16 CONCLUSION

Following on from a 2021 petition requesting Council close Reserve Street to through traffic and construct the unformed section of Tabilban Street at Burleigh Heads, two new petitions about the same matter have been submitted.

As the new petitions, and the engineering report submitted with each petition, introduce no new information or changes in circumstance, the recommendations in relation to this matter remain as per the previous report to Council in October 2022.

Council's previous resolution was based on the Koala Park Traffic Study completed in 2022, which identified that the existing east-west through route was essential to the operation of the wider road network and that the petition proposition cannot be supported as it:

- will induce more through traffic use of the Koala Park residential area.
- will reduce local residential amenity.
- will impact on the local environment.

- will come with a high financial cost that does not provide a value for money outcome for ratepayers.
- does not have the support of the wider community.

#### 17 RECOMMENDATION

It is recommended that Council resolves as follows:

- 1 That the propositions outlined in both petitions (G23.0615.065 and G23.0822.050) be rejected as they introduce no new information or changes in circumstance from the petition resolved by Council on 21 October 2022 (G22.1021.055).
- 2 That no further petitions be received on this matter unless significant new information and/or a change of circumstance becomes apparent where investigating a further petition proposition is in the wider public interest and warrants resource allocation.
- 3 That the Transport and Infrastructure Director (or delegate) be authorised to notify the Lead Petitioner of Council's decision.

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Transport and Infrastructure Committee Meeting #836 (10 October 2023)

#### Response to Petitions – Review Traffic Operations Reserve Street Burleigh Heads

#### **ATTACHMENT 1**

#### Previous Council Resolutions

Timing	Petition No.	Title / Subject	Resolution No.	Content
August 2023	3	Received		n/a
June 2023	2	Received	G23.0615.065	n/a
October 2022	1	Response	G22.1021.055	<ol> <li>That Council rejects the petition proposition of closing Reserve Street and constructing the Tabilban Street link at Burleigh Heads.</li> </ol>
				<ol> <li>That Council endorse as its preferred option of keeping the status quo with a suite of local network improvements.</li> </ol>
				<ol> <li>That low cost safety treatments at the Tabilban Street – Reserve Street curve and crest be implemented as soon as practical.</li> </ol>
				4. That engineering investigations be undertaken into the local network concepts identified in the Koala Park Traffic Management Study with a report to be considered by the Transport and Infrastructure Committee within 12 months, and that this report include a review of the outcomes delivered in Part 3.
				<ol> <li>That the Transport and Infrastructure Director (or delegate) be authorised to notify the Chief Petitioner of Council's decision and the basis for the decision.</li> </ol>
June 2021		Interim Response	G21.0608.006	<ol> <li>That Council undertake a comprehensive Traffic Study of the Koala Park area of Burleigh Heads in 2021-22.</li> </ol>
				<ol> <li>That the outcomes of the Koala Park Traffic Study specifically address the issue of the unformed section of Tabliban Street in the context of the wider traffic network, as well as local amenity.</li> </ol>
				<ol> <li>That the Transport and Infrastructure Director (or delegate) be authorised to notify the Chief Petitioner of Council's interim decision and the basis for the decision.</li> </ol>
January 2021		Received	G21.0129.015	"This petition is to close Reserve St and join Tabilban St South and North easing the traffic flow through Koala Park in Burleigh Heads."

Timing	Petition No.	Content				
August 2023	3	Immediate removal of the Unacceptable Non-Compliant High-Order to Low-Order Reserve Street diversion.				
		We the undersigned respectfully petition the Council of City of Gold Coast to resolve the following:				
		<ol> <li>During the Council's Transport &amp; Infrastructure Committee Meeting 824 it was recorded in clause 5.5 that the:</li> </ol>				
		<ul> <li>"function of the Koala Park (Ikinna - Tabilban) route is a major collector road within the City's transport network"; and</li> </ul>				
		(ii) "The Koala Park route is performing a major collector road function, not a bypass link and its current use is applicable to its function".				
		1.2 The West section of Tabilban Street has already undergone full reconstruction to bring it to current standards.				
		1.3 The Reserve Street diversion within the regional urban transport network does not conform to any applicable engineering standards.				
		1.4 It has been a long underlying principle of Local Area Traf2c Management (LATM) that local streets should only be available for the terminal ends of journeys and for local circulation, and not to be regarded as part of the regional urban transport network.				
		1.5 By acknowledging and accepting the road classi2cation of the Koala Park route has changed from a Collector to a Major Collector, and as it has been recognised that the Koala Park route provides access between two State-controlled roads, Council is now legally obligated to follow Legislation and bring the balance of the Koala Park route, in its entirety, to current standards, following:				
		(i) Engineering best practice;				
		(ii) National Benchmarks; and				
		(iii) Australian Standards.				
		We the undersigned respectfully demand the immediate removal of the unacceptable and non-compliant High-Order to Low-Order Reserve Street diversion, and the upgrade of the entirety of the Koala Park route.				
		1.6 We append a Report from Rytenskild Traffic Engineering dated 11 April 2023, which the petitioner had commissioned, as further support for the above proposal, and to further highlight to Council the shortcomings within the Bitzios Report in addressing the core underlying factors affecting Ocean Parade and Reserve Street.				
June 2023	2	We the undersigned respectfully petition the Council of City Of Gold Coast in response to "824 Transport And Infrastructure Committee Meeting Minutes" and the "Bitzios Consulting Koala Park Traffic Study" to respond and resolve the following 4 matters:				
		1. How did the Councils consulting Engineers "Bitzios Consulting" come to the conclusion to upgrade the classification of the lkinna-Tabilban route from a Collector to a Major Collector. Which infrastructure road design guides were used? Also which Engineering best practices and National Benchmarks/Australian Standards were applied to this outcome?				
		2. How did the Councils consulting Engineers "Bitzios Consulting" come to the conclusion that the Reserve Street diversion remains as is? Why was the diversion left out of the study. Which best practice and national benchmarks were used as to how council still allows traffic from a High Order Road to be diverted into Low Order adjacent Streets only to continue back onto itself.				
		<ol><li>How does council consider the TOKENISTIC consultation process appropriate for an engineering problem, when council themselves created the problem in the first place.</li></ol>				
		4. We request that Councillor Daphne McDonald reads out the specially prepared Engineers report below, during the petition presentation. Council to resolve this issue with the Appropriate Outcome as outlined in the report below.				
October 2022	1	This petition is to close Reserve St and join Tabilban St South and North easing the traffic flow through Koala Park in Burleigh Heads.				

#### PETITION TO COUNCIL OF CITY OF GOLD COAST

We the undersigned respectfully petition the Council of City Of Gold Coast in response to **"824 Transport And Infrastructure Committee Meeting Minutes"** and the **"Bitzios Consulting Koala Park Traffic Study"** to respond and resolve the following **4** matters:

**1.** How did the Councils consulting Engineers "**Bitzios Consulting**" come to the conclusion to upgrade the classification of the Ikinna-Tabilban route from a **Collector** to a **Major Collector**. Which infrastructure road design guides were used? Also which Engineering best practices and National Benchmarks/Australian Standards were applied to this outcome?

**2.** How did the Councils consulting Engineers "**Bitzios Consulting**" come to the conclusion that the **Reserve Street diversion** remains as is? Why was the diversion left out of the study. Which best practice and national benchmarks were used as to how council still allows traffic from a **High Order** Road to be diverted into **Low Order** adjacent Streets only to continue back onto itself.

**3.** How does council consider the TOKENISTIC consultation process appropriate for an engineering problem, when council themselves created the problem in the first place.

**4.** We request that Councillor Daphne McDonald reads out the specially prepared Engineers report below, during the petition presentation. Council to resolve this issue with the Appropriate Outcome as outlined in the report below.

rytenskild TrafficEngineering	Facsimile: 1300 087177 info@rytenskildtraffic.com RYTENSKILDTRAFFIC.COM	Suite 2 24 Surfers Avenue Mermaid Beach QLD 4218	Suite 52 149 Wickham Toe Spring Hill QLD 4000	Level 26 44 Market Street Sydney NSW 2000
11 April 2023				

Dear Sir,

#### REVIEW OF TRAFFIC OPERATIONS TABILBAN STREET / RESERVE STREET, BURLEIGH HEADS

Reference is made to the above matter and your request for Rytenskild Traffic Engineering to review current traffic operations and Council's current planning to address increasing traffic volumes.

#### 1 Background

The Ikkina Road - Tabilban Street – Reserve Street - Ocean Parade route (referred further as the "route") has operated as an informal through route for many years. Over the years, local residents have complained to Council about excessive traffic volume and vehicle speeds and Council has responded with the implementation of Local Area Traffic Management (LATM) devices. The LATM devices have served to reduce speeds and deter heavy vehicles, however the route is still a popular through route, as it provides a significant travel time saving to travelling through the Burleigh Heads village.

The route has never been designated as a formal bypass or diversion, however it is clearly a shortcut for traffic moving between Tallebudgera and West Burleigh. This is particularly the case during peak traffic periods when congestion occurs on the Gold Coast Highway through the village. As congestion in the village has increased over the years, so has the use of the route as a shortcut.

#### 2 Road Geometry and Classification

The geometry of the roads that make up the route vary as follows:

 Ikkina Road functions as a Collector Road and has a varying carriageway width of approximately 11 metres comprising of two travel lanes and a parallel parking lane on each side. Angle parking is provided adjacent to shops located at the eastern end. There is a speed platform including a marked zebra crossing is located just south of the Tawarri Crescent intersection. A raised central island has been implemented at the corner of Ikkina Road and Tabilban Street to manage speeds and the travel path. The speed environment is 40 Km / Hr.



REVIEW OF TRAFFIC OPERATIONS TABILBAN ST / RESERVE ST, BURLEIGH HEADS

Tabilban Street (south) functions as a Collector Road and has a varying pavement width of 10m – 12m and includes unmarked parallel parking on each side. There are three Watts profile speed humps in place to deter speeding. The speed environment is 40 Km / Hr. To the west of Djerral Avenue, Tabilban Street has a steep gradient (westbound) of approximately 25% (max).

rytenskild

affic Engli

- Reserve Street has the geometry of a local access street however functions as a Collector Street by virtue of its connection to Tabilban Street. It has a pavement width of approximately 6.5 metres. The speed limit is approximately 40 Km / Hr.
- Ocean Parade is a local access street with a pavement width of approximately 8 metres. Informal parallel parking is available along each side. The speed limit is approximately 40 -50 Km / Hr.
- Tabilban Street (west of Ocean Parade) has a varying pavement width of 12 metres. The section includes unmarked parallel parking lane along the southern side. The parking lane on the northern side has recently been marked. The speed environment is 40 – 50 Km / Hr.

The Reserve Street / Ocean Parade intersection is STOP sign controlled with Ocean Parade having priority.

Tabilban Street intersects with West Burleigh Road via traffic signals. The Gold Coast Highway / Ikkina Road intersection is also traffic signal controlled. Both the Gold Coast Highway and West Burleigh Road are State controlled roads.

#### 3 Design traffic characteristics

Based on road classification and geometrical characteristics, the following design volumes are applicable to each road section under Council's standard road design drawings:

- Tabilban Street 3,000 vehicles per day
- Ikkina Road 3,000 vehicles per day
- Ocean Parade 3,000 vehicles per day
- Reserve Street 750 vehicles per day.

The various standard road profiles are shown in Figure 1. It is noted that Ikkina Road and Tabilban Street generally take the form of a Collector Road (bus route), however buses cannot service the area due to the gradient of Tabilban Street.

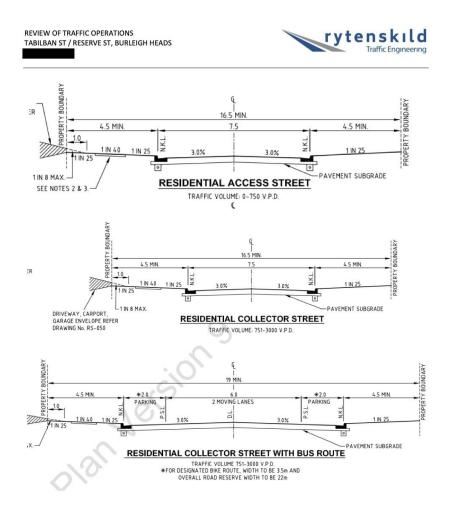


FIGURE 1 – COUNCIL STANDARD DESIGN ROAD CROSS SECTIONS

Page 3 of 5

REVIEW OF TRAFFIC OPERATIONS TABILBAN ST / RESERVE ST, BURLEIGH HEADS



#### 4 Observed traffic conditions

Traffic counts carried out in March 2023 indicate that Reserve Street is currently carrying in the order of 10,000 - 12,000 vehicles per day. A volume of approximately 11,500 vehicles per day was recorded on Reserve Street during the week of  $13^{th}$  March 2023.

The queue of vehicles stopped at the Ocean Parade / Reserve Street intersection regularly extends down Tabilban Street, causing difficulties associated with "hill starts" on the steep grade. It was observed that a vehicle towing a caravan had to be assisted as it could not hill start.

Observed traffic volumes are well in excess of Council's own specifications for a residential street network, and well outside of what is typically considered acceptable for a residential street network by other standards and design guidelines.





FIGURE 2 – TYPICAL IMAGES OF CONGESTION ON TABILBAN ST AND RESERVE ST

Page 4 of 5

REVIEW OF TRAFFIC OPERATIONS TALIBAN ST / RESERVE ST, BURLEIGH HEADS



#### 5 Appropriate Outcome

We have observed extracts from a report prepared on behalf of Council which suggests that a road such as Tabilban Street could reasonably carry in the order of 10,000 vehicles per day. In this context, the report appears to refer to the section of Tabilban Street west of Ocean Parade in isolation and without having regard to the extended route connecting to the Gold Coast Highway. This is inappropriate considering constraints associated with the geometry of Ocean Parade, Reserve Street and Ikkina Road, and the topography of Tabilban Street to the east of Reserve Street.

The above volume would be appropriate as the "engineering capacity" of a two lane sub-arterial route where is no or minimal direct lot access and adjoining land uses are not noise sensitive. It is not suitable for an established residential road which intended for local access, with direct lot access and where dwellings are positioned relatively close to the road. Adjoining buildings would typically be commercial or high density residential which have been designed to mitigate road noise.

The characteristics of connecting roads clearly do not support high traffic volumes and it is not reasonable or appropriate to encourage through traffic on streets that have been designed for local access, and have already exceeded accepted limits. Furthermore, the steep gradient of Tabilban Street cannot safely accommodate queuing, which regularly extends from the Ocean Parade / Reserve Street intersection.

In our opinion, based on engineering best practices and national benchmarks, Ocean Parade and Reserve Street should be severed from the through traffic route of Ikkina Road – Tabilban Street, with the "missing link" on Tabilban Street constructed. These roads are not designed to carry through traffic and the network should not have been configured so that they form part of a collector route. It is considered that Ikkina Road and Tabilban Street east of Reserve Street should be upgraded to an urban collector route with marked parking and travel lanes. The Tabilban Street / Reserve Street intersection should be disconnected from Tabilban Street (ie converted to a cul de sac), with a roundabout constructed at the Tabilban Street / Ocean Parade intersection. Additional LATM devices should be provided along Tabilban Street west of Ocean Parade to further discourage through traffic and manage vehicle speeds.

Please contact the undersigned regarding and queries in relation to this matter.

Yours faithfully

1kytanki

LUKE RYTENSKILD DIRECTOR, B.ENG (Civil), RPEQ 6293

Page 5 of 5

# Immediate removal of the Unacceptable Non-Compliant High-Order to Low-Order Reserve Street diversion.

We the undersigned respectfully petition the Council of City of Gold Coast to resolve the following:

- 1. During the **Council's Transport & Infrastructure Committee Meeting 824** it was recorded in clause 5.5 that the:
  - (i) "function of the Koala Park (Ikinna Tabilban) route is a **major collector road** within the City's transport network", and
  - (ii) "The Koala Park route is performing a **major collector road** function, not a bypass link, and its current use is applicable to its function".

1.2 The West section of Tabilban Street has already undergone <u>full reconstruction</u> to bring it to current standards.

1.3 The Reserve Street diversion within the regional urban transport network does not conform to any applicable engineering standards.

1.4 It has been a long underlying principle of Local Area Traffic Management (LATM) that local streets should only be available for the terminal ends of journeys and for local circulation, and <u>not</u> to be regarded as part of the regional urban transport network.

1.5 By acknowledging and accepting the road classification of the Koala Park route has changed from a **Collector** to a **Major Collector**, and as it has been recognised that the Koala Park route provides access between two State-controlled roads, Council is now legally obligated to follow Legislation and bring the balance of the Koala Park route, in its entirety, to current standards, following:

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We the undersigned respectfully demand the **immediate removal** of the unacceptable and noncompliant High-Order to Low-Order Reserve Street diversion, and the upgrade of the entirety of the Koala Park route.

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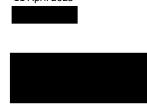


Ph. 1300 220020 Facsimile: 1300 087177 info@rytenskildtraffic.cor RYTENSKILDTRAFFIC.COM GOLD COAST Suite 2 4 Surfers Aver Mermaid Beach QLD 4218

SYDNEY Suite 52 149 Wickham To Spring Hill QLD 4000

BRISBANE

Level 26 44 Market Stre Sydney NSW 2000



Dear Sir,

#### **REVIEW OF TRAFFIC OPERATIONS** TABILBAN STREET / RESERVE STREET, BURLEIGH HEADS

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The geometry of the roads that make up the route vary as follows:

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REVIEW OF TRAFFIC OPERATIONS TABILBAN ST / RESERVE ST, BURLEIGH HEADS



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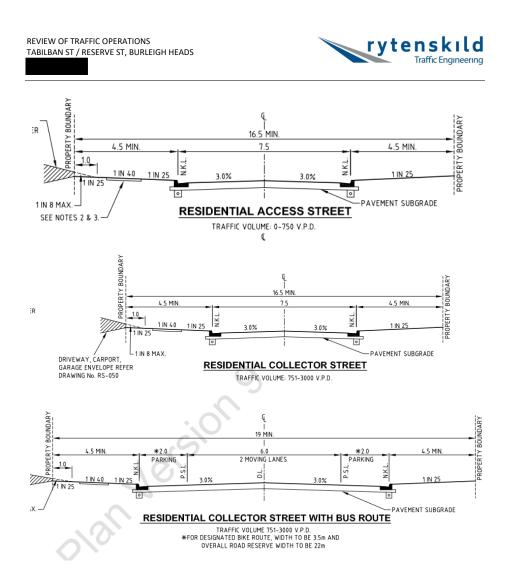


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REVIEW OF TRAFFIC OPERATIONS TABILBAN ST / RESERVE ST, BURLEIGH HEADS



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Traffic queued at Gold Coast Hwy / Ikkina Road – queue extending over 600m to Reserve St

FIGURE 2 – TYPICAL IMAGES OF CONGESTION ON TABILBAN ST AND RESERVE ST

Page 4 of 5

REVIEW OF TRAFFIC OPERATIONS TALIBAN ST / RESERVE ST, BURLEIGH HEADS



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Please contact the undersigned regarding and queries in relation to this matter.

Yours faithfully

LUKE RYTENSKILD DIRECTOR, B.ENG (Civil), RPEQ 6293

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## 6.2★ HOPE ISLAND DRAINAGE, CHANNEL AND FLOOD MITIGATION REVIEW

Objective ID:	A91402758	
File Number:	ER295/52/46/81	
Authors:	Alex Le Royer, Coordinator (stormwater), City Assets Adam Turner, Principal Drainage Engineer, City Assets	
Authoriser:	Cath Drinkwater, Director Transport and Infrastructure, Transport and Infrastructure	
Attachments:	1↓Hope Island Canal Hydraulic Impact Assessment Report 20232↓↓4↓↓ </td	

## 1 BASIS FOR CONFIDENTIALITY

Not applicable.

## 2 EXECUTIVE SUMMARY

The purpose of this report is to advise Council of the benefits realised regarding the Hope Island Channel (HIC). The intent of the HIC is to protect future development from flooding whilst also providing flood mitigation improvements. This report also details findings regarding channel dredging, pontoons, and management of drainage assets.

The Hope Island drainage system has been developed generally in accordance with the intent and purpose set out in the Hope Island Development Control Plan (DCP). The intention of the proposed channel was to carry flood waters from Hope Island Resort's channel system along a 3km easterly route to the Broadwater at Boykambil Village. The channel would also have two branches which would be connected by a flushing pipe under Sickle Avenue to form a 1.5km anabranch from the main channel.

City Assets have undertaken a Hydraulic Impact Assessment (HIA) on the creation of the Hope Island channel. This assessment concludes that the purpose of the HIC has been achieved and the introduction of the channel and the surrounding raising of ground levels has significantly reduced flooding and allowed large scale residential development within the suburb of Hope Island.

After construction of the channel, investigations were undertaken which indicated that approximately 950 marina berths along the HIC could be distributed. Approval of marinas and pontoons constructed within the HIC are subject to the owner entering a lease agreement with the City. As of April 2023, there are approximately 66 pontoons, 275 marina berths and 2 drydocks constructed within the HIC.

Revenues collected from the leases are quarantined into a maintenance and operations budget utilised primarily for hydrographic surveys, sediment sampling and dredging operations.

A Maintenance and Operations Plan (MOP) is in place to facilitate channel management, maintenance and operation. The requirement for dredging will be triggered if siltation rates exceed 0.7m due to localised impact on flood levels. A bathymetric survey in completed in June 2023 indicated the average fill depth since construction of the HIC is 0.429m indicating that dredging would be required by 2035. It is recommended that when dredging is required, a report be bought forward to Council with further consultation from City stakeholders to determine the exact amount and cost to dredge the HIC.

There are many assets around the HIC that are managed by City including flood gates, drainage pipes, drainage pits, and flood mitigation drainage fittings. City Assets have developed asset management plans (AMP) to guide the City in managing the maintenance, renewal or upgrade of these assets.

## 3 PURPOSE OF REPORT

This report is to investigate whether the Hope Island Channel (HIC) is serving its intended purpose.

## 4 PREVIOUS RESOLUTIONS

Ex Minute G08.1212.017

*"a policy position in the affirmative to investigate pontoons in the HIC in response to development applications for pontoons."* 

Ex Minute G09.1123.027

"d That rental received from leases of marina sites at Hope Island be placed into Reserve as they are received with such Reserve to provide Council with an accumulating balance which could be called upon in future years to fund the dredging of the Hope Island Channel."

Ex Minute G21.1012.060

"that for the Body Corporates relating to Cova North Residences CTS 45638, Cova Marina CTS 44722, COVA South CMS 37431:

- 1. Rent and licence fees as well as rates and charges which accrued in the period of 1 May 2013 to June 2018 be written off.
- 2. Rent and licence fees only be charged for the period in which the owner at that time had use of the pontoon.
- 3. Rates and Charges which accrued in the period 1 May 2013 to June 2018 to be written off.
- 4. Rate and charges not to be charged for any period to the benefited lot being purchased by the current owner.
- 5. The outstanding rent, licence fees, rates and charges be paid in quarterly payments without interest or other penalty."

Minute No. WC13027

*"that Council proceed to declare the lands included in Schedule "B" as a Drainage Problem Area, in accordance with Bylaw No. 23".* 

## 5 DISCUSSION

#### 5.1 History

In the early to mid-1980's Sanctuary Cove was established, Hope Island Resort approved and a bridge link was established to Paradise Point. These developments brought urban services to Hope Island making it more accessible. As a consequence, interest began to be shown in development of the balance of the area.

Flooding and drainage were seen as major physical constraints to further development, as sites required significant earthworks to raise land levels and improve drainage capabilities.

The Hope Island Development Control Plan (DCP) prepared in 1995, was based on a concept of open space drainage paths approximately 175m wide and designed to accommodate flood flows in an overland or natural manner. Following submissions from landowners, this was changed to a channel concept to enhance the desirability and value of adjacent private land by increasing the area of land able to be developed while at the same time providing flood mitigation advantages to Hope Island.

In March 1995, the City of Gold Coast (City) signed the Hope Island Canal Agreement with the Hope Island Canal Association (HICA), which represented the bulk of the channel fronting landowners. This agreement set out the terms for coordinating construction of a large portion of the channel. In order to construct the channel, land which was owned by members of HICA was to be dedicated as drainage reserve and the channel was to be excavated and completed with a revetment wall and other appropriate works.

In October 1995, the State Government approved an application by the City for construction of the HIC via the City of Brisbane (Flood Mitigation Works Approval) Act 1952 (CBFMWA Act). The Hope Island Canal Agreement and the CBFMWA Act were closely linked and gave the City the authority to proceed with the works.

The HIC was connected to the Coomera River in 2004 with the remainder of the channel under the Sickle North and Sickle Avenue South Bridge completed on 7 July 2007 and 7 November 2013 respectively, representing approximately 25 years of commitment by the City to address flood mitigation in the area. To comply with the approval granted to the City by the State under the CBFMWA Act, the City is responsible to maintain the HIC.



Figure 1: Aerial photo (2002) Pre-Channel

## 5.2 Floodway – Flood mitigation and hydraulics

The Hope Island drainage system has been developed generally in accordance with the intent and purpose set out in the DCP. The main objective of the DCP was for the HIC to protect future development from flooding whilst also providing flood mitigation advantages in comparison to the pre-developed flood prone Hope Island.

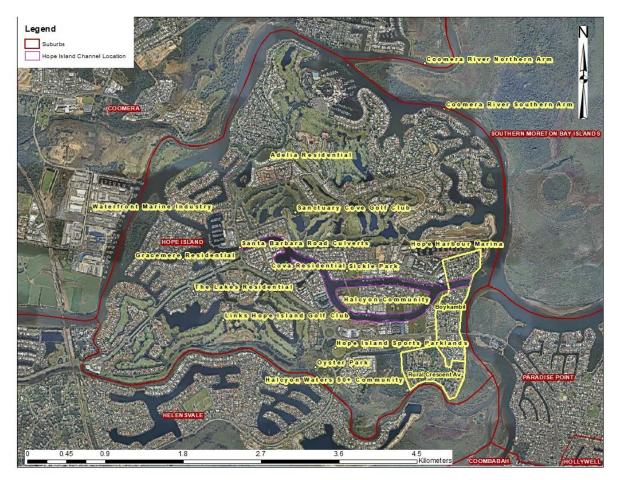
On 8 December 1976 (minute number WC13027) Council declared Hope Island as a Drainage Problem Area. Prior to this, the City had no legal power to insist that a dwelling or house be built above flood lines. However, the bylaw gave the City power to control the floor level or refuse an application within declared Drainage Problem Areas.

Notwithstanding, as Hope Island is located in the Coomera River Estuary, flooding considerations were featured prominently in the City's planning for the development of Hope Island. Prior to development occurring, flood waters were carried down the Coomera River and flowed across the island in as sheet flow, for development of the island to occur floodwaters had to be controlled. The DCP provided the primary vehicle for controlling flood waters on land to be developed and a key flood mitigation measure featured in the DCP was the development of a channel between Hope Island Resort and Boykambil.

The intention of the proposed channel was to carry flood waters from Hope Island Resort's channel system along a 3km easterly route to the Broadwater at Boykambil Village. The channel would also have two branches which would be connected together by a flushing pipe under Sickle Avenue to form a 1.5km anabranch from the main channel.

The DCP gazetted as part of the Planning Scheme of February 1995, expressed Council's planning objectives for development of the low-lying flood prone area of Hope Island that was substantially undeveloped and in fragmented land ownership. The purpose of the DCP was to provide a framework for development of the Hope Island area which included the construction of the HIC as well as providing preferred dominant land uses for the area. One of these land uses was for drainage and access reserve which covered land intended to be dedicated to, or acquired by, the City as drainage paths to accommodate flood flows. It was intended that the land be excavated to form the HIC system to enhance the desirability of the adjoining land while at the same time providing flood mitigation advantages to Hope Island.

The main intention behind construction of the HIC was for flood mitigation purposes so that flood waters flowing from the Coomera River, west of the island, would be conveyed through the HIC system across to the Broadwater, east of Boykambil Village.



## Figure 2: Aerial Photo (2021) Post - Channel

## Development of West Boykambil

It is important to note that the Hope Island DCP has since been replaced with the City Plan to achieve a consistent approach throughout the entire city. The code aims to mirror the objectives set out in the DCP. The outcomes in the flood overlay code include but is not limited to avoiding or lessening the adverse impacts of flooding and ensuring development is located, designed and managed to mitigate the risk to life and property.

Hydraulic Assessment (including review of Crescent Avenue, Pool Street and Nelson Avenue)

As part of this review, City Assets undertook a Hydraulic Impact Assessment (HIA) of the current configuration of the HIC versus the pre-construction of the channel. The HIA identifies the hydraulic changes that have occurred due to the inclusion of the HIC over a range of design flood events. These design flood events include a 39%, 20%, 10%, 5%, 2%, and 1% AEP storm flood event. Annexed to this Report is the HIA undertaken by City Assets.

A 1% AEP design flood event was simulated with a 2.05m AHD peak storm surge tailwater condition, to reflect the tailwater condition used in previous reports by external companies prior to construction of the HIC. This modelling indicated that a significant portion of Hope Island is no longer inundated with the development of the channel. This is predominantly the areas raised with fill to allow the construction of new residential developments. With this modelled event, the majority of Boykambil displays no changes in flood levels, with some areas seeing a 0.01m decrease in flood waters and the northern area of Boykambil displaying minor flood level increases on the street (up to 0.006m).

Further, the hydraulic modelling results from the HIA indicates that the primary outcome to control flood waters through Hope Island is being achieved, with large areas of land that were previously inundated now free from riverine flooding. The existence of the channel conveys floodwaters more efficiently through Hope Island, altering the transport of floodwater as sheet flow across a wide span of area as was the case prior to the construction of the HIC to the concentrated flow within the channel allowing the adjacent land to be developed.

The area in Boykambil Village overall displays a reduction and removal of flood inundation for the modelled events with only a minor increase around a small section of road, as shown in the below table.

Location	Increase / decrease	Area Type
Majority of Boykambil	-0.01m	Habitable floor levels, property, Roadway
Northern Bokambil (Boykambil Esplanade North)	+0.006m	Roadway
Waterfront Marine Industry area	-0.09m	Habitable floor levels, property, Roadway
Rural Crescent Ave	0.03m	Existing low-lying areas historically impacted by flooding. No impact to habitable floor levels.

Table 1: Sample Hydraulic Results

In the northern part of Boykambil is Nelson Avenue and Pool Street where properties were developed prior to the construction of the HIC and likely in accordance with the regulations at the time of development. However, due to the updated DFL in light of the inclusion of revised potential global sea level rise, these properties are now below the current DFL. If these properties were to be constructed now, they would be required to achieve 300mm freeboard above the DFL. For example, if the average DFL is 2.4m AHD, the habitable floor will be at least 2.7m AHD.

Recent applications in Nelson Avenue and Pool Street have been submitted to the City for the redevelopment of properties into multi-storey developments. These applications have been conditioned by the City that the ground floor level of the dwelling shall not to be converted into a habitable room and shall be constructed of water-resistant material suitable for water inundation with all electrical, power and telecommunication services to be located above the DFL. By imposing these conditions on the applicant and acknowledging this area of Hope Island is prone to flooding, the City is ensuring that the habitable floors of new dwellings will not be inundated for flood events up to and including that of the DFL. Thus, the purpose of the HIC has been achieved, in that it allowed the introduction of fill to achieve large scale residential development within the suburb of Hope Island whilst controlling flood waters so as to ensure no adverse impact.

Impact of pontoons on hydraulic conveyance

As part of The Hope Island Channel – *Jetties and Pontoons Master Plan* described below, a report for Marina Quays Precinct 2 Siltation and Dredging was prepared by Cardno Lawson Treloar (Cardno) in 2010. Cardno developed the DE17 case in their investigation which included the proposed Sickle Avenue Parkland Bund, the full HIC jetties and pontoons arrangement, and the proposed lowering of the Santa Barbara Road downstream bund from 1.22mAHD to 1.10mAHD. The results of the report identified that:

"upon completion of the modification of the bund downstream of Santa Barbara Rd crossing, the construction of the full arrangement of jetties/pontoons throughout the HIC system can be completed without any significant adverse flooding impacts".

Further, the report concluded that:

"the modelling demonstrates that it is possible to achieve no significant adverse flood level impacts external to the HIC system whilst providing a mixture of parallel and perpendicular berthing arrangements in the Canal in accordance with the attached Master Plan. This is accomplished through the modification of the existing bund immediately downstream of the Santa Barbara Road crossing and bunding of the Sickle Avenue parkland.

The Cardno report has been adopted by the City and is now implemented into development approvals for marinas and pontoons within the HIC. When an application is submitted for the construction of a marina or pontoon within the HIC, an applicant will be conditioned to comply with the Cardno Hydraulic Impact Assessment Report and ensure that all works in relation to the marinas are carried out and completed in accordance with this approved report.

## 5.3 Pontoons and channel dredging

Development approvals are granted to applicants for the construction of pontoons, marina berths or dwellings and are subject to conditions. As a result of increased development, maintenance responsibilities have expanded with the City documenting them through maintenance and management plans, lease agreements and conditions within development approvals.

## Marina development and pontoon lease agreements

Subsequent to similar developments, the City gives consideration to cumulative hydraulic effect and could not consider the hydraulic impact of a single marina or pontoon in isolation.

This position required a lead developer to undertake the cumulative hydraulic investigations. Throughout 2007 developers refined their investigations and an application was submitted on 21 August 2008. The *Hope Island Channel – Jetties and Pontoons Master Plan* illustrated a plan to distribute pontoon structures throughout the entire HIC. To enable this Master Plan to be achieved, hydraulic modelling was undertaken which indicated that approximately 950 berths along the HIC could be distributed by an equitable formula to the various landholders with a property right or interest with frontage to the Channel.

As of April 2023, there are approximately 66 pontoons, 275 marina berths and 2 drydocks constructed within the HIC leaving a balance of 607 berths for which it is anticipated that more applications will be submitted and more will be constructed in the future.

Upon construction of the marinas and pontoons, Council resolved to issue owners and body corporates with lease agreements for use of the HIC. As the City owns the HIC in freehold tenure, it is entirely within the City's right to determine what it deems appropriate in respect of private uses and benefits obtained from its land versus purely public interest outcomes, that being similar to a community park.

Subject to development applications for pontoons or marinas being approved, where relevant a condition is imposed whereby the applicant and/or future principal body corporate is

required to enter into a lease agreement for use of the channel. The Hope Island marina facility leases are granted for a term of 100 years to body corporates and 20 years to waterfront landowners on Palladium Boulevard for a single pontoon lease.

## Charges applied for pontoons

The HIC areas which are leased to body corporates and individuals must be, by law, at or above market value established by an independent valuer commissioned by the City. In June 2020, the City obtained valuation advice which established a per annum market value of berthing entitlement for body corporate marinas and for pontoons on Palladium Boulevarde.

In order to assess the market rental value of the seabed lease area, a residual/hypothetical development methodology was adopted which considered the following:

- sale price of marina berth with a long-term lease
- cost of construction
- holding costs
- timeframe
- appropriate return on investment
- developer's profit and risk margin.

Accordingly, it is recommended a market review is conducted on a regular basis every five to ten years.

As per a Council meeting of 23 November 2009 (Ex Minute G09.1123.027), Council considered leasehold tenure matters associated with a combined reconfiguration of lot and material change of use application for a 56-berth marina in the HIC. Council resolved, in part as follows:

"d That rental received from leases of marina sites at Hope Island be placed into Reserve as they are received with such Reserve to provide Council with an accumulating balance which could be called upon in future years to fund the dredging of the Hope Island Channel."

## Channel survey and trigger for dredging interventions

Revenues collected from the leases are quarantined into a maintenance and operations budget utilised primarily for hydrographic surveys, sediment sampling and dredging operations. In 2010, it was determined that a systematic approach to channel maintenance is paramount to help guide existing and future City employees and decision makers. This led to a Maintenance and Operations Plan (MOP) being prepared to facilitate a best-practice approach to channel management, maintenance and operation. The purpose of the MOP is to ensure that the City meets its obligations to maintain the drainage function of the HIC pursuant to the CBFMWA Act.

The MOP aims to guide the development of dredge management plans for future maintenance dredging of the HIC in accordance with legal requirements for flood mitigation. The MOP scope of maintenance includes dredging for flood mitigation, monitoring accretion and erosion through bathymetric surveys as well as sediment monitoring including within the extents of each leased area. The MOP further outlines that a bathymetric survey is required every three years or after a significant flooding or storm event. If the results of the survey indicate that siltation depth exceeds 0.7m, dredging may be required due to localised impact on flood levels.

These dredging interventions outlined in the MOP reflect a report for Marina Quays Precinct 2 Siltation and Dredging prepared by Cardno Lawson Treloar (Cardno) in 2009. Cardno was engaged by Urban Planning Services to undertake a review of siltation rates with the aim of determining anticipated dredge volumes based on navigation and flooding constraints. This report found that "the situation with average siltation of 0.7m is estimated to start causing minor localised impacts in excess of 2mm."

From its creation through to 2010, bathymetric surveys indicated that the accretion rate was approximately 0.03m per year. This estimation was considered conservative due to lack of formal water quality controls, bridge construction activities which occurred, and construction activities associated with development of the surrounding area. Notwithstanding this, it was determined that as the surrounding area is developed and mandatory sediment and other water quality control measures are implemented, it would be likely that the siltation rate within the HIC will significantly decrease.

In line with the MOP, the City undertakes a bathymetric survey every three years. The most recent Hope Island Channel Survey was conducted in June 2023 with the results indicating the following:

- That the average siltation fill depth since construction is 0.429m.
- The average fill depth per annum was 0.023m.
- The estimated year for flood mitigation dredging is 2035.

As anticipated the accretion rate has reduced as much of the island has now been developed. It is important to note that the results extracted from the surveys undertaken will be subject to change and results may differ significantly from year to year. There are factors which contribute to the results including surrounding development, weather and significant storm events which may increase or decrease the siltation rate.

#### Costs involved for dredging

If the findings of a survey triggers the need for dredging, it is envisaged that the City would procure a dredging company to undertake the required work. Dredging contracts require a sufficient level of clarity and definitions of the works to be executed for the contract to adequately price the works. To minimise the risk allowance to be borne by tenderers within their dredging costs, adequate data should be provided to allow accurate pricing. The MOP outlines key considerations which can ensure a competitive and refined quote by contractors.

From previous projects undertaken by the City, it should be noted that unit dredging costs rates are showing a significant increase from the previous 10 years which may be attributed to different factors such as:

- 1. The distance that the dredged material will be required to be pumped to the dredge spoil facility.
- 2. Costs associated with treatment and disposal of material including potential market value for the resale of spoil.
- 3. High costs associated with alternate dredging and disposal methods.

Additionally, there may be some beneficial reuse of the spoil or disposal methods of the material which will be dependent on the characterisation of the sediment. The MOP provides different disposal and reuse options based on the level of contamination of the spoil.

When dredging is required, a report will be presented to Council outlining the volume/depth of sediment to be dredged, the costs to undertake the works and the funds available in the Hope Island Channel Reserve Fund (HICR). As mentioned above, the HICR was established to fund the recurring and non-recurring maintenance activities of the channel.

## 5.4 Asset management and flood mitigation devices

The Flood Mitigation and Drainage (FMD) assets within the HIC are managed by the City under the FMD AMP and are grouped according to similar or complementary functions and are categorised under the following groupings which are discussed separately in the AMP:

- 1. Underground stormwater drainage network.
- 2. Aboveground stormwater drainage network.
- 3. Stormwater quality improvement devices.
- 4. Flood mitigation drainage structures.

In order to maintain the assets, the City has adopted different mechanisms to ensure that assets continue to serve their intended purposes through an asset management cycle. The

objective of this mechanism is to minimise the infrastructure whole of life costs whilst maintaining assets in a safe and serviceable condition.

Concurrently, asset condition assessment and performance monitoring are undertaken on a regular basis to monitor the condition of the asset over time which provides the City with data for future renewal programs. Assessment of assets are divided into three levels being visual inspection, engineering assessment, and detailed engineering assessment. Further, maintenance information for each asset is provided in a Condition Assessment Plan which is prepared by the City and applied in conjunction with the AMP. The Condition Assessment Plan provides guidance of the asset type and frequency of inspections required. By managing public assets in accordance with the AMP, the City can ensure that assets are achieving their intended design life as well as their required level of service for the community.

There has recently been concerns raised by residents of Crescent Avenue, Hope Island regarding flooding in the area and the request for the drainage systems to be upgraded. These requests to upgrade the drainage system may be counterproductive as installing larger stormwater pipes may cause water to backflow in flood events. The construction of bunds, whilst may assist with the reduction of flooding with smaller flood events, carries the risk of magnifying damage with larger events when the level is eventually breached and may not be aesthetically pleasing.

Currently, there are backflow prevention devices installed within the HIC area to assist with flood mitigation and prevent the tidal waters from flowing back up in the drainage system and into the low-lying areas. These devices are inspected as a minimum on an annual basis to ensure they are performing as intended.

# 6 ALIGNMENT TO THE COUNCIL PLAN, CITY STRATEGIES AND OPERATIONAL PLAN

Our Council Plan supports the implementation of the City Vision. It describes the outcomes we are working towards and our measure of success. This report aligns to the Council Plan 2022-2027 through the following core themes:

## LIVEABLE PLACES

- We manage our resources for a sustainable future.
- We have a prepared community and a natural and built environment resilient to hazards.

This report aligns also to The Stormwater Drainage Management Plan 2021-2031 which was adopted by Council in 2021 (refer ex Minute G21.0518.012). Priority Outcome 5 of the plan aims to:

Deliver an effective asset management framework - with a key action being:

• Validate the effectiveness and efficiency of various stormwater management solutions through monitoring optioneering and modelling results.

## 7 FUNDING AND RESOURCING REQUIREMENTS

#### Budget/Funding Considerations

It is recommended that a report be presented to Council once a requirement to dredge the HIC is identified. This should outline the volume/depth of sediment to be dredged, the costs to undertake the works and the funds available in the HICR.

#### **Costs for Capital Works and Service Proposals**

Not applicable.

#### People and Culture

Not applicable.

## 8 RISK MANAGEMENT

Not applicable.

## 9 STATUTORY MATTERS

In October 1995, the State Government approved an application by the City for construction of the Hope Island Channel via the *City of Brisbane (Flood Mitigation Works Approval) Act 1952* (CBFMWA Act). The Hope Island Canal Agreement and the CBFMWA Act were closely linked and gave the City the authority to proceed with the works.

## 10 COUNCIL POLICIES

Not applicable.

#### 11 DELEGATIONS

Not applicable.

## 12 COORDINATION & CONSULTATION

Name and/or Title of the stakeholder consulted	Directorate or organisation	Is the stakeholder satisfied with the report and recommendations (Yes/No) (comment as appropriate)
Jeremy Wagner, Manager City Assets	Transport and Infrastructure	Yes
Liam De Lucia, Executive Coordinator Stormwater, Beaches and Waterways	Transport and Infrastructure	Yes
Ali Jafari, Executive Coordinator Engineering Design	Transport and Infrastructure	Yes
Alex Le Royer, Coordinator Stormwater	Transport and Infrastructure	Yes
Scott Vis, Senior Specialist Engineer Stormwater	Transport and Infrastructure	Yes

#### 13 STAKEHOLDER IMPACTS

Not applicable.

#### 14 BRISBANE 2032 OLYMPIC AND PARALYMPIC GAMES IMPACT

Not applicable.

#### 15 TIMING

Not applicable.

#### 16 CONCLUSION

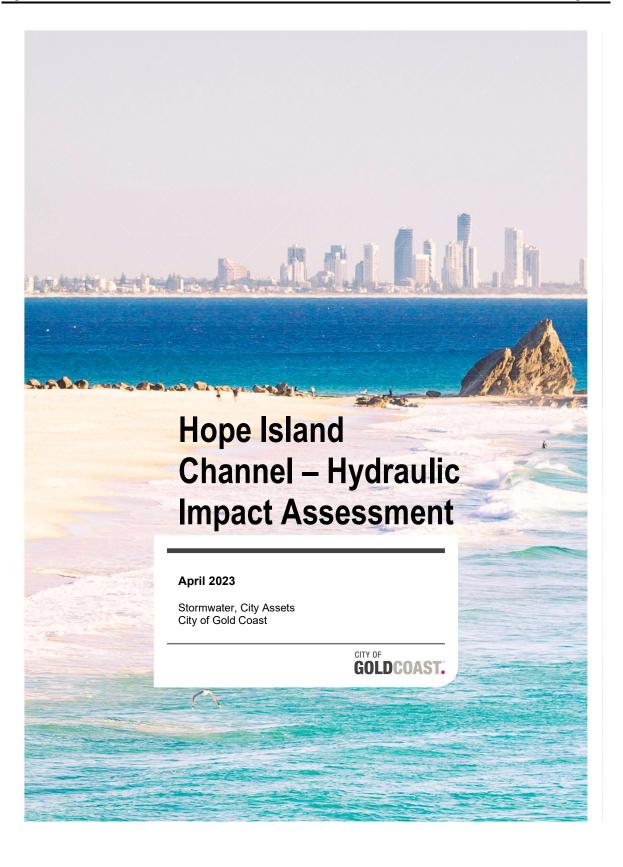
In conclusion, the Hope Island Channel is serving its original intended purpose to control the flow of water through the suburb of Hope Island to enable large scale residential development. There is a future issue which may arise being whether there are sufficient funds in the Hope Island Channel Reserve Fund when the channel is required to be dredged. Regardless, it is recommended that a report be presented to Council once a requirement to dredge the HIC is identified. This should outline the volume/depth of sediment to be dredged, the costs to undertake the works and the funds available in the Hope Island Channel Reserve Fund.

## 17 **RECOMMENDATION**

It is recommended that Council resolves as follows:

- 1 That Council notes the contents of this report.
- 2 That a future report is presented to Council once a requirement to dredge the Hope Island Channel is identified. This should outline the volume/depth of sediment to be dredged, the costs to undertake the works and the funds available in the Hope Island Channel Reserve.





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#### 1. Executive Summary

This report outlines the outcomes of a hydraulic impact assessment (HIA) on the creation of the Hope Island channel. The HIA assessed the changes in water level (afflux) over a range of design flood events for the pre-channel conditions in the year 2001, against the post-channel conditions of 2020.

This HIA is part of a larger study involving a historical information review on multiple aspects of the Hope Island channel's intended purpose and whether these objectives are being met.

The Hope Island Channel was constructed to control floodwaters moving through the suburb to allow filling and the development of adjacent land that was previously impracticable due to flooding.

A copy of the CoGC Coomera River Catchment Hydraulic TUFLOW model (v2.3.5) was used for this HIA, with updates made to the model to reflect the study area more accurately.

Multiple hydraulic investigations were undertaken by external consultancies before and during the channel's construction to support development applications and/or development works, and to assess any associated potential flooding impacts, inclusive of the Hope Island channel.

Historical airborne laser scanning (ALS) data from 2001 was utilised to represent the Hope Island topography before the channel was constructed. The changes in topography for pre-channel and post-channel highlight the excavated Hope Island channel, the raised ground level for the new developments and the relatively unchanged ground level of the low-lying village of Boykambil. ALS data capture accuracy has improved since the 2001 (pre-channel) to the 2021 (post-channel). The technology advancements may create potential discrepancy in the Digital Terrain Model (DTM) data captured between the years which may contribute to the slight differences in water levels (afflux) between the modelled scenarios.

The model was simulated for the 39%, 20%, 10%, 5% and 1% AEP design storm flood events. The 1% AEP design flood event was simulated with a 2.05m AHD peak storm surge tailwater condition, to reflect the tailwater condition used in the previous Kinhill Cameron McNamara Engineers hydraulic report prepared in 1993, which provided a pre and post development assessment of development on Hope Island with the inclusion of the Hope Island channel. For the Hope Island area, the 24-hour design flood event was the critical duration for all AEPs except for the 39% AEP, where the 18-hour was critical.

The HIA results indicated that the introduction of the Hope Island channel and the raising of land through fill, has significantly reduced the spatial extent of riverine flooding across the Hope Island suburb and allowed further residential development to the area, with only minor adverse flooding impacts.

The modelling indicates the Boykambil village to have significantly benefited from the inclusion of the channel for the frequent to major flood design storm events simulated.

The Rural Crescent Avenue area displays an increased flood immunity to the habitable buildings due to the raised ground level since pre-channel, however, the surrounding land has displayed minor increases in flood inundation up to 0.03m for the modelled 1% AEP event.

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#### 2. Report Administration

		APPROVED
Engineer (Author)	Scott Vis	Scott Vís
RPEQ certifier	Ali Jafari RPEQ 19979	( Josefai
Manager City Assets	Jeremy Wagner	

#### 3. Introduction

City Assets Stormwater were engaged to undertake a Hydraulic Impact Assessment (HIA) of the current configuration of the Hope Island channel versus pre-construction of the channel, around the year 2001. The HIA was undertaken using the Coomera TUFLOW Hydraulic model v2.3.5.

#### 3.1 Project Area and Background

This HIA is part of a larger study involving the Hope Island Channel, whereby City Assets have been requested to undertake a historical information review on multiple aspects of the channel's intended purpose and whether these objectives are being met.

Prior to the development of the channel, when flood waters breached the Coomera River, shallow sheet flow would occur across Hope Island, connecting back to the Coomera River near the small town of Boykambil. The Hope Island Channel's main purpose was to provide opportunities for future development by controlling flood waters through the island. With the inclusion of the channel, adjoining land could be filled and raised above the flood plain for development.

This report will solely focus on the HIA and identify the significant hydraulic changes that have occurred due to the inclusion of the Hope Island Channel over a range of design flood events.

Previous hydraulic studies have been undertaken by Engineering consultancies (WBM Pty Ltd and Kinhill Cameron McNamara Pty Ltd) to support development applications and/or development works, and to assess any associated potential flooding impacts, inclusive of the Hope Island channel.

Figure 1 displays an aerial photo from 2002 before the channel's construction. From the aerial photo the Hope Island suburb was predominately open grass and rural areas with Golf Courses and limited residential areas.

Figure 2 displays an aerial photo from 2021 displaying the constructed Hope Island Channel and a significant increase in residential density.

Council's "Defined Flood Level" (DFL) map has significant coverage across the suburb of Hope Island (Figure 3). The DFL is used to inform building floor levels. The DFL is based on the 1% AEP design flood event for the predicted future year 2100 climate. The DFL ranges from 3.8m Australian Height Datum (AHD) at the southwestern side of Hope Island, down to 2.4m AHD at the eastern side of Hope Island. Boykambil Village has a surface elevation in the approximate range of 1.0-2.0m AHD and is inundated by the DFL level of approximately 2.4m AHD.

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Figure 1. Aerial Photo (2002) Pre-Channel



Figure 2. Aerial Photo (2021) Post-Channel

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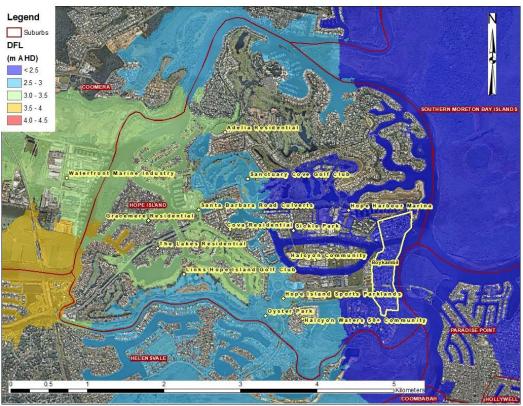


Figure 3. DFL - Hope Island

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#### 4. Hydraulic Impact Assessment (HIA)

A copy of the CoGC Coomera River Catchment Hydraulic TUFLOW model (v2.3.5) was used for this HIA.

The HIA compares the 2001 pre-channel and post-channel 2020 scenarios to understand how development topography changes and the inclusion of the Hope Island channel has hydraulically affected the surrounding area. This is achieved by comparing floodwater levels (afflux).

The model was updated at the Santa Barbara Culverts to represent the structure more accurately, which is critical for this HIA. The structure is described in detail in Section 3.3.3.

To increase model accuracy in the larger grid size areas the sub-grid sampling (SGS) function was also applied in the TUFLOW model. SGS applies the underlying 2m DTM to the larger grids to create curves representing the finer Digital Elevation Model (DEM) cell terrain. This allows the finer detail of the 2m DEM to be applied to larger grid sizes so that model simulation times can be reduced without losing grid detail.

The TUFLOW engine 2020-10-AB was utilised for this HIA, which was the latest release of TUFLOW engine at the time of conducting this investigation.

#### 4.1 Assumptions and Limitations

This HIA has been based on the information available to us at the time of preparation. We accept responsibility for the HIA and its conclusions to the extent that the information was sufficient and accurate at the time of preparation. We do not take responsibility for errors and omissions due to incorrect information or information not available to us at the time of preparation of this HIA.

This HIA does not include local stormwater drainage within the model. This HIA has been developed to assess the flooding impact on a large suburb scale, it is not appropriate to assess individual property lots.

Water quality has not been included within this assessment.

For the purpose of comparison, the 2001 ALS data to create the pre-channel scenario is only applied to the Hope Island suburb, all remaining areas utilise the post-channel data. As the 2001 ALS data does not include any bathymetry information, the post-channel DTM bathymetry data was maintained in the pre-channel DTM.

ALS data capture has improved from the 2001 (pre-channel) to the 2020 (post-channel). There may be discrepancies in the DTM levels due to the improvements in ALS data capture.

The potential effects of climate change (sea level rise and rainfall intensity increase) have not been included in this HIA as this was not a typical design parameter, or typical design criteria, at the time of the channel's original design and associated hydraulic assessments.

The findings are based on the modelled events only, and not all possible rainfall events or tidal boundary conditions have been modelled for this HIA.

#### 4.2 Modelled Events

The model was simulated for the design storm events presented in

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Table 1. This includes the 39%, 20%, 10%, 5% and 1% AEP design flood events. The 39%, 20% 10% and 5% AEP design flood events were simulated with a constant Mean High-Water Spring (MHWS) tailwater condition, consistent with typical Hydraulic Impact Assessments. The 1% AEP design flood event was simulated with a 2.05m AHD peak storm surge tailwater condition, to reflect the tailwater condition used in the previous 1993 Kinhill Cameron McNamara Engineers hydraulic report, which provided a pre and post development assessment of development on Hope Island with the inclusion of the Hope Island channel.

For the Hope Island area, the 24-hour design flood event was the critical duration for all AEPs except for the 39% AEP, where the 18-hour was critical.

Table 1. Design Flood Events		
Riverine Flood	Tailwater Condition	
39% EN3 18hour	Constant MHWS 0.66m AHD	
20% EN8 24hour	Constant MHWS 0.66m AHD	
10% EN5 24hour	Constant MHWS 0.66m AHD	
5% EN5 24hour	Constant MHWS 0.66m AHD	
1% EN5 24hour	Peak Storm Surge 2.05m AHD, middle of the rising tide coinciding with peak of flood <sup>1</sup>	
* EN (Tomporal Battorn Engar	a b la Alvana b a av	

\* EN (Temporal Pattern Ensemble Number)

<sup>1</sup> As per the 1993 KCM Hydraulic Report tailwater boundary condition

#### 4.3 TUFLOW Model Updates

Updates were made to the existing Coomera TUFLOW model to more accurately reflect the conditions pre and post channel. For the pre-channel scenario, the addition of 2001 Airborne Laser Scanning (ALS) data to the Hope Island Area was applied, and the associated material/roughness layer was updated accordingly. For the post-channel scenario, the Santa Barbara Culvert structure was more accurately represented.

#### 4.3.1 2001 Airborne Laser Scanning (ALS) Data – Pre-Channel

Historical ALS data captured over the Gold Coast area in June 2001 was utilised for this HIA. This data was applied to update the pre-channel scenario DTM within the Hope Island suburb area. All remaining DTM area within the Coomera model outside the Hope Island suburb maintained the existing (2020 post-channel) DTM data. The 2001 ALS data did not include any bathymetry information, therefore the existing (post-channel) DTM bathymetry data was maintained in the pre-channel DTM.

The change in elevation between the post and pre channel scenario DTM used in the hydraulic model is displayed in Figure 4. The excavation of the channel can be seen as a lowering by more than 3m. The filling of the floodplain for development is displayed around the channel with large areas of the ground level raised by over 1m, to an approximate level of 2.7 - 3.2m AHD. The Boykambil Village area has not significantly changed, remaining relatively low-lying with the streets at a level of approximately 1-1.5m AHD, and the area generally between approximately 1.0-2.0m AHD. The lots within the Rural Crescent

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Avenue display some areas of raised land. The raised land areas are predominately located around the building footprints within the properties, where the ground level has been raised to construct housing with an increased flood resilience. Habitable building levels were extracted from available building plans to compare against modelled flood levels.

It should be noted that the ALS data capture accuracy has improved since the 2001 (pre-channel) to the 2020 (post-channel). Therefore, the DTM comparison may display a slight change in ground level in some instances when this may not have occurred. Instances of this potential irregularity can be seen in the Boykambil area to the north of the channel (Figure 4), whereby the DTM indicates the area to have been lowered by approximately 0.1m to 0.3m. Normally this amount of lowering to a suburb is unrealistic and is most likely a result of the differences in ALS data capture and post processing. This outlines a potential discrepancy in the available DTM data captured between different years which may contribute to differences in water levels (afflux) between the modelled scenarios.

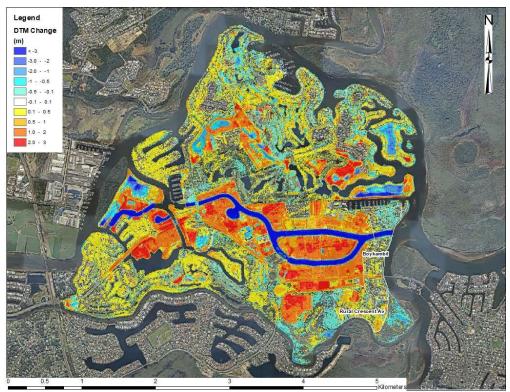


Figure 4. DTM Change, Post-Channel MINUS Pre-Channel

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#### 4.3.2 Roughness

Roughness (manning's n) values were updated for the pre-channel scenario to reflect the ground conditions more accurately in 2001. Material IDs and their relative manning's n value are displayed in Appendix A for pre-channel and post-channel respectively.

#### 3.3.3 Santa Barbara Culverts

The Santa Barbara Culverts and the connected earth bund controls the flow through the Hope Island Channel. The culverts consist of 11 rectangular box culverts 3.6m wide by 2.1m high, at an invert level of 0.14m AHD (Figure 5). At the downstream side of the culverts there is an earth bund at a level of 1.1m AHD (Figure 6). This culvert and bund configuration is used in the post-channel model scenario.



Figure 5. Upstream - Santa Barbara Culverts

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Figure 6. Downstream - Santa Barbara Culverts

#### 4.4 HIA Results

The TUFLOW model was run for the pre-channel and post-channel scenarios for the flood events as outlined in section 3.2.

A comparison of the pre-channel and post-channel hydraulic outputs were reported to gain an understanding of how development topography changes and the inclusion of the Hope Island channel has hydraulically affected the surrounding area. This was achieved by comparing floodwater levels (afflux).

The pre-channel and post-channel maximum flood water level for all modelled design AEP events are displayed in Appendix B.

#### 39% and 20% AEP Riverine Flood with Constant MHWS Tailwater

The modelled 39% and 20% AEP flood events display similar afflux results. As these are only minor flooding events, the flooding spatial extent is contained within the main channels for the pre and post channel results. The inclusion of the channel has slightly reduced the flooding extent mainly in areas where the ground level has been raised. There are some areas of slight afflux increase contained within the golf courses and wetlands.

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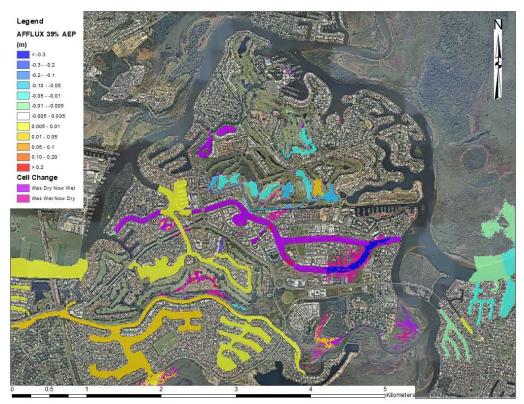


Figure 7. Afflux 39% AEP

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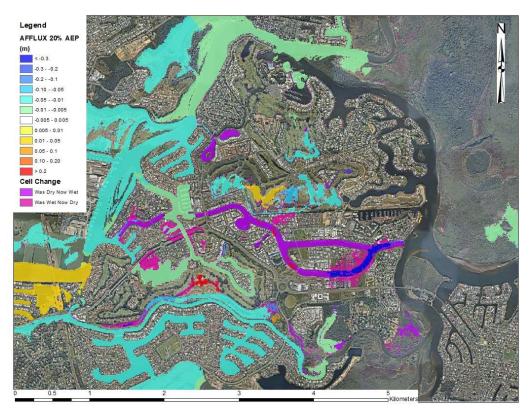


Figure 8. Afflux 20% AEP

#### 10% and 5% AEP Riverine Flood with Constant MHWS Tailwater

The 10% and 5% AEP flood events display a slightly larger area of removal from riverine flood inundation for the post-channel scenario to the raised area west of Boykambil. The raised ground level of the Gracemere and Lakes residential area has also resulted in the elimination of flooding. Streets and some properties within Boykambil now display no riverine flooding in the post-channel scenario. Floodwaters have reduced by approximately 0.08m in the Waterfront Marine Industry area to the west of Hope Island. There are areas of afflux increase contained within the golf courses, parks, wetlands, creeks and channels.

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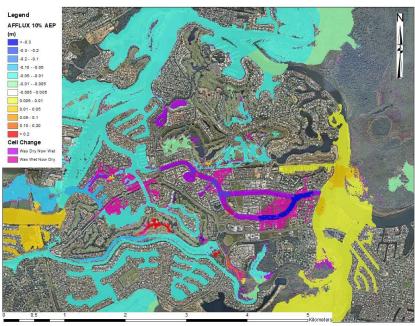
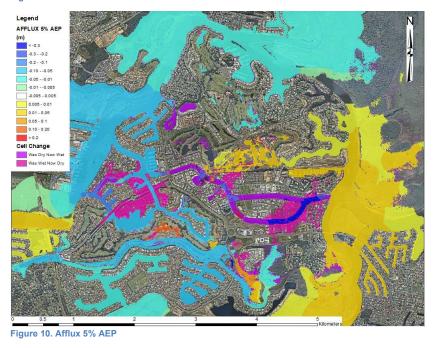


Figure 9. Afflux 10% AEP



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#### 1% AEP Riverine Flood with rising tide to Peak Storm Surge 2.05m AHD Tailwater

The 1% AEP afflux map (Figure 11) displays a significant proportion of Hope Island is no longer inundated with the creation of the channel and the development topography changes. This is predominately the areas raised with fill to allow the construction of new residential developments. The Waterfront Marine Industry area displays flood depth reductions up to 0.07m. Sanctuary Cove Golf Club has reductions up to 0.03m. For this design flood event, the majority of Boykambil displays no change in flood levels, with some areas seeing 0.01m decrease in flood waters and the northern area of Boykambil displays flood level increases up to 0.006m. The Rural Crescent Avenue area displays parts with flood inundation increases up to 0.03m. These increases do not occur on the habitable building footprint areas, which have had the ground level raised, resulting in the removal of flood inundation. Similarly to the more frequent design storm events, flood storage areas in golf courses, parks and wetlands are producing increases in afflux in those locations.

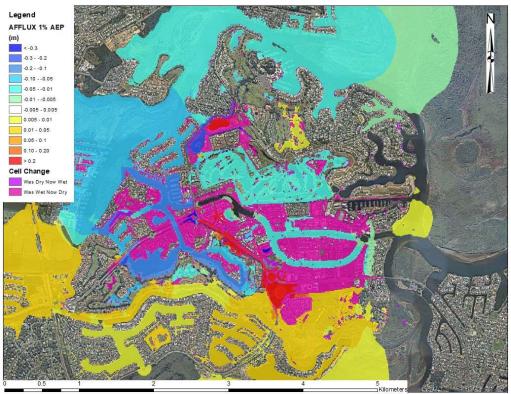


Figure 11. Afflux 1% AEP

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#### 4 Conclusion

The development and construction of the Hope Island channel was primarily to control flood waters through the low-lying flood prone suburb so that the area could be utilised for residential development with the raising of land with additional fill. The hydraulic modelling results from this HIA indicate that these outcomes are being achieved, with large areas of land that were previously inundated now free from riverine flooding.

The existence of the channel conveys floodwaters more efficiently through the Hope Island suburb, altering the transport of floodwater as sheet flow across a wide span of area (pre-channel), to the concentrated flow within the channel (post-channel), that has allowed the adjacent land to be developed. The development has included the new residential areas of Adelia, Gracemere, Cova, Lakes, Halcyon Community and Halcyon Waters and more.

The inclusion of the channel has also benefited the Waterfront Marine Industry area to the west of Hope Island within Coomera, whereby the modelling indicates flooding levels reducing by 0.09m.

With the concentrated flow through the channel, the modelling indicates a slight decrease in floodwater height that exits the Coomera River northern arm, resulting in a slight increase in the floodwater height at the Coomera River southern arm.

Boykambil village overall displays reduction and removal of flood inundation for the modelled events, with only a minor increase of approximately 0.006m to a small section of road along Boykambil Esplanade North and infringing on the edge to five properties.

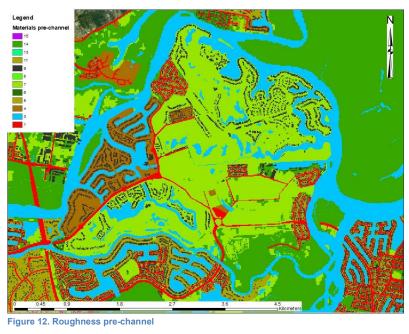
Flooding changes around Rural Crescent Avenue remains relatively unaffected for the modelled events below the 1% AEP. For the modelled 1% AEP event there are some minor increases in flood inundation up to 0.03m. This slight increase does not affect habitable building floor levels in the area, which are above the modelled 1% AEP flood level.

The Hope Island channel and introduction of land fill has significantly reduced flooding and allowed large scale residential development within the suburb of Hope Island.

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**APPENDIX A** 



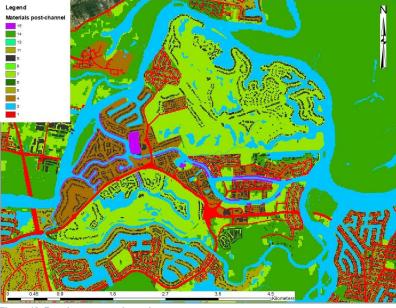


Figure 13. Roughness post-channel

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asio 2. materi	als Roughness Man Manning's	
ID	(n)	Description
1	0.02	Roads
2	0.013	Concrete
3	0.025	River Channel
4	0.1	Urban Residential
5	0.08	Rural Residential
6	0.13	Forest
7	0.06	Grass low density vegetation
8	0.033	Short grass
9	0.3	Building structure
10	0.2	Bridges or culverts
11	0.04	Not used
13	0.03	Not used
14	0.1	Medium density vegetation
15	0.15	Pontoon/Jetties

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#### **APPENDIX B**



Figure 14. Maximum Floodwater Height - 39% AEP Pre-channel

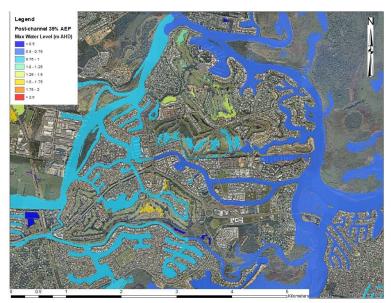


Figure 15. Maximum Floodwater Height - 39% AEP Post-channel

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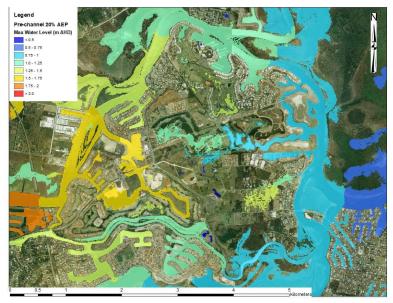


Figure 16. Maximum Floodwater Height - 20% AEP Pre-channel

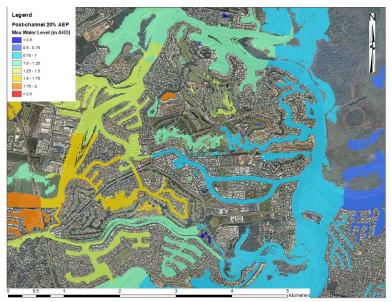


Figure 17. Maximum Floodwater Height - 20% AEP Post-channel

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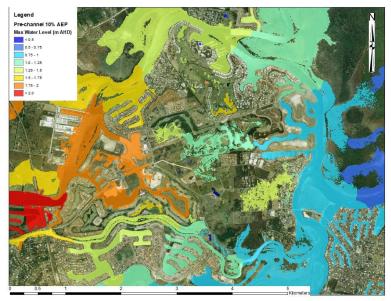


Figure 18. Maximum Floodwater Height - 10% AEP Pre-channel

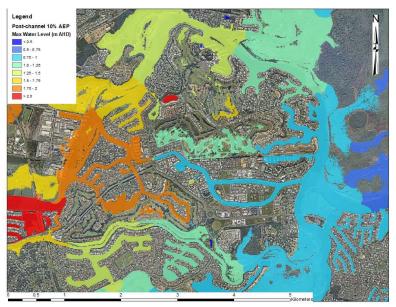


Figure 19. Maximum Floodwater Height - 10% AEP Post-channel

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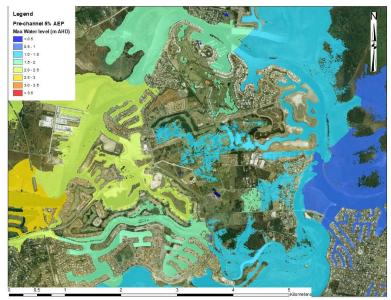


Figure 20. Maximum Floodwater Height - 5% AEP Pre-channel

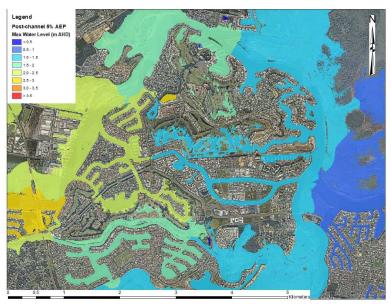


Figure 21. Maximum Floodwater Height - 5% AEP Post-channel

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Figure 22. Maximum Floodwater Height - 1% AEP Pre-channel

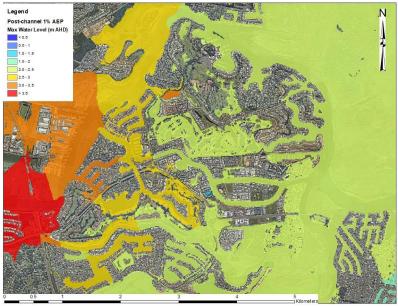


Figure 23. Maximum Floodwater Height - 1% AEP Post-channel

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Figure 1. Aerial Photo Current Day (2023)



Figure 2. Aerial Photo (2002)



Figure 3. Aerial Photo (1989)



Figure 4. Aerial Photo (1974 floods)

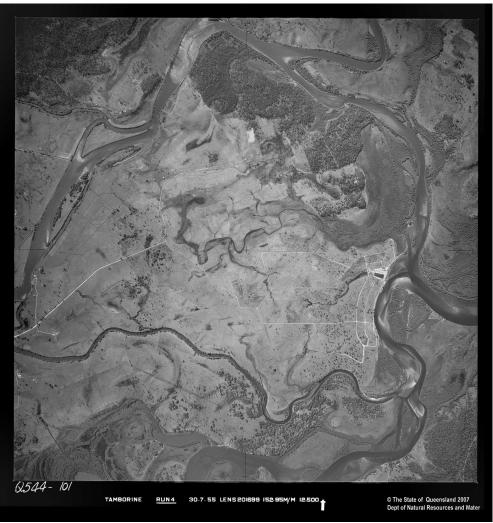


Figure 5. Aerial Photo (1955)

Objective ID:	A91661861					
File Number:	WFB600/655/01					
Author:	Alex Pundyk, Coastal Management Technical Officer, City Assets					
Authoriser:	Cath Drinkwater, Director Transport and Infrastructure, Transport and Infrastructure					
Attachments:	1. Gold Coast World Surfing Reserve Local Stewardship Committee #9 Meeting Minutes					
	2. Draft Gold Coast World Surfing Reserve Annual Report 2022/23					
	3. Gold Coast World Surfing Reserve Local Stewardship Committee - Previous Resolutions					

### 1 BASIS FOR CONFIDENTIALITY

Not applicable.

### 2 EXECUTIVE SUMMARY

Not applicable.

### 3 PURPOSE OF REPORT

The purpose of this report is to:

- Present the World Surfing Reserve Local Stewardship Committee meeting minutes and recommendations from the meeting held on 19 July (Attachment 1) for Council's notation.
- Seek Council's endorsement to submit the Gold Coast World Surfing Reserve Local Stewardship Committee Annual Report 2022-23 (Attachment 2) to the Save the Waves Coalition.

### 4 PREVIOUS RESOLUTIONS

Previous resolutions are provided in Attachment 3.

### 5 DISCUSSION

**5.1 BACKGROUND**On 9 October 2015, a section of the City's coastline stretching from Burleigh Heads to Snapper Rocks was approved by the Save the Waves Coalition (a non-profit organisation) as the 8th World Surf Reserve (WSR). The dedication to the newly acquired WSR status occurred on 8 March 2016.

A WSR dedication is a ceremonial (non-legislative) initiative of the Save the Waves Coalition which required the support of Council (refer G15.0911.036).

A requirement for all WSR dedications is the development of a stewardship plan and the formation of a Local Stewardship Committee (LSC). The Gold Coast WSR LSC's Terms of Reference was endorsed by Council (G16.0129.028), and states that the City's Surf Management Plan (SMP) acts as the Stewardship Plan for the WSR.

The objectives of the LSC are to:

• Guide the dedication ceremony of the WSR (completed March 2016).

- Promote the WSR to local, state, national and international audiences to encourage the wider appreciation of these unique coastal environments, and impressive surfing recreation resources.
- Support the WSR designation as part of the prestigious network of renowned World Surfing Reserves.
- Further, the designation of WSR status on the southern Gold Coast beaches, with a wide range of interested stakeholder groups.
- Convey the issues raised from all the assembled key stakeholder groups within the LSC, via the chairman, to other levels of government with direct responsibilities for management of the WSR designated coastal and surfing environments.

## Local Stewardship Committee (LSC) Meetings

LSC meetings have been held on the following dates:

- 9 February 2016
- 11 August 2016
- 26 June 2017
- 24 July 2018
- 28 August 2019
- 23 February 2021
- 18 October 2021
- 16 August 2022
- 24 November 2022 (Extraordinary meeting SMP Five Year Review)
- 19 July 2023

Attachment 1 contains the minutes from the WSR LSC meeting held on 19 July 2023.

### Annual Report

In December 2015, Council resolved (G15.1211.044) 'to report annually to the Save the Waves Coalition on progress towards implementing the Surf Management Plan (SMP) insofar as it relates to the southern Gold Coast WSR'.

The Gold Coast World Surfing Reserve Local Stewardship Committee Annual Report 2022-23 (Attachment 2) was considered and endorsed by the LSC in July 2023. The Annual Report provides a summary of the City's progress implementing the objective outcomes of the SMP throughout 2022-23 within the Gold Coast WSR boundaries and presenting the planned activities to progress the objective outcomes of the SMP in 2023-24.

With Council's endorsement, it is proposed to send the Annual Report 2022-23 to the Save the Waves Coalition, as resolved at the LSC meeting on 19 July 2023.

# 6 ALIGNMENT TO THE COUNCIL PLAN, CITY STRATEGIES AND OPERATIONAL PLAN

Our Council Plan supports the implementation of the City Vision. It describes the outcomes we are working towards and our measure of success. This report aligns to the Council Plan 2022-2027 through the following core themes:

### DIVERSE THRIVING ECONOMY

• We have sustainable economic growth in the industries and sectors that offer opportunity.

- We develop, attract and retain the best talent in our city.
- We are the best place to visit in Australia.

### VIBRANT LIFESTYLE

- We are a safe, active and healthy community.
- We have accessible community and cultural infrastructure which supports social connections.

### CONNECTED COMMUNITY

- We provide safe and sustainable travel choices to enable us to move around the city easily.
- We have beaches, parklands, waterways and natural places that are accessible and enjoyed by everyone.
- We are a digitally connected city.

### NATURALLY UNIQUE

- We have critical nature corridors throughout the city.
- We balance city growth and our natural environment.

### LIVEABLE PLACES

- We plan city growth and ensure sufficient capacity and types of housing to meet future needs.
- We manage our resources for a sustainable future.
- We have a prepared community and a natural and built environment resilient to hazards.

### ONE CITY

- We address the challenge of climate change through practical and sensible solutions that deliver climate resilience.
- We partner to leverage emerging opportunities for the city ahead of the Brisbane 2032 Olympic and Paralympic Games.
- We are a high performing, customer focused organisation which delivers value for money.

A range of City strategies support the implementation of the City Vision and Council Plan. The City Operational Plan highlights key activities where these contribute to strategic transformation for the City. This report aligns to the following:

### Ocean Beaches Strategy 2013-2023

The project contributes to the following strategy outcomes:

- Everyone can enjoy a beach experience.
- Our beaches are healthy and clean.
- Our infrastructure is protected from coastal hazards.
- There is joint stewardship of the ocean beaches.

Action 1.3 of the Ocean Beaches Strategy was the development of a SMP. The purpose of the SMP is to recognise the importance of surfing to the city's lifestyle and economy.

### Surf Management Plan (SMP)

- The Gold Coast WSR LSC accepts that the City's SMP constitutes the deliverables regarding the local site-specific stewardship plan for the Gold Coast WSR.
- As part of the WSR governance process, the Gold Coast WSR LSC is required to table and submit an Annual General Report to the Save the Waves Coalition.

### 7 FUNDING AND RESOURCING REQUIREMENTS

Implementation of the Surf Management Plan is funded via Budget Centre C12530o004

### 8 RISK MANAGEMENT

Not applicable.

### 9 STATUTORY MATTERS

Legislation relevant to the OBS and SMP are outlined below.

- Planning Act 2016
- Coastal Protection and Management Regulation 2017
- Subordinate Local Law No. 10.1 (Bathing Reserves) 2005
- Transport Operations (Marine Safety) Act 1994
- Fisheries Act 1994
- The Environmental Protection and Other Legislation Amendment Act 2020
- Tweed River Entrance Sand Bypassing Project Agreement Act 1998
- Marine Parks Act 2004
- Maritime Safety Queensland Act 2002
- Gold Coast Waterways Authority Act 2012 (GCWA Act)

### 10 COUNCIL POLICIES

Not applicable.

### 11 DELEGATIONS

Not applicable.

## 12 COORDINATION & CONSULTATION

Name and/or Title of the stakeholder consulted	Directorate or organisation	Is the stakeholder satisfied with the report and recommendations (Yes/No) (comment as appropriate)			
Director Transport and Infrastructure – Cath Drinkwater	Transport and Infrastructure	Yes			
Manager City Assets – Jeremy Wagner	Transport and Infrastructure	Yes			
Manager 2032 City Coordination unit – Trish Apps	Lifestyle and Community	Yes			
Executive Coordinator Stormwater Beaches and Waterways – Liam De Lucia	Transport and Infrastructure	Yes			

The City takes a consultative and coordinated approach to managing and recognising surf amenity; and consults with all members of the LSC and government agencies that contribute to the beach management outcomes of the Gold Coast.

### 13 STAKEHOLDER IMPACTS

Not applicable.

### 14 BRISBANE 2032 OLYMPIC AND PARALYMPIC GAMES IMPACT

- A potential impact is that should surfing be included within the Brisbane 2032 Olympic Games, the venue would likely fall within the Gold Coast World Surf Reserve. This is due to the proximity of Brisbane to the Gold Coast World Surf Reserve and the high quality surf amenity within the Gold Coast World Surfing Reserve.
- It is considered prudent that, via the Local Stewardship Committee, the City consult the 2032 Olympics Coordination team regarding this potential interdependency.

### 15 TIMING

With Council's endorsement, it is proposed to send the Gold Coast World Surfing Reserve Local Stewardship Committee Annual Report 2022-23 (Attachment 2) to the Save the Waves Coalition as resolved at the LSC meeting on 19 July 2023.

### 16 CONCLUSION

The WSR is an initiative of the non-profit organisation, Save the Waves Coalition. The southern Gold Coast beaches from Burleigh Heads to Snapper Rocks were declared a WSR in October 2015. The dedication ceremony took place in March 2016.

In December 2015, Council resolved (G15.1211.044) 'to report annually to the Save the Waves Coalition on progress towards implementing the SMP insofar as it relates to the southern Gold Coast WSR'.

The Gold Coast World Surfing Reserve Local Stewardship Committee Annual Report 2022-23 (Attachment 2) provides a summary of the City's Surf Management Plan's achievements/progress to date for the Gold Coast WSR in 2022-23. With Council's endorsement, it is proposed to send the Gold Coast World Surfing Reserve Local Stewardship Committee Annual Report 2022-23 (Attachment 2) to the Save the Waves Coalition as resolved at the LSC meeting on 19 July 2023.

### 17 **RECOMMENDATION**

It is recommended that Council resolves as follows:

- 1 That Council notes the contents of the report.
- 2 That Council endorse the submission of the Gold Coast World Surfing Reserve Local Stewardship Committee Annual Report 2022-23 (Attachment 2) to the Save the Waves Coalition.

#A90866152

# **Meeting minutes**

### Annual World Surf Reserve Local Stewardship Committee Meeting #9

19 July 2023 (3.00pm – 4.30pm)

### Currumbin RSL | MS Teams

Present: Cr Pauline Young (PY) - Chair, Cath Drinkwater (CD), Michael Hart MP Member for Burleigh (MH), Adam Yates (AY), Andrew McKinnon (AM), Wayne Bartholomew (WB), Chris Butler (CB), Brendan Frawley (BF), Peter Kleinig (PK), Jason Thomas (JT)

Invitees: Cr Daphne McDonald (DM), Liam De Lucia (LD), Scott Gillies (SG), Alex Pundyk (AP), Linda Rijkenberg (LR).

Apologies: Mayor Cr. Tom Tate (TT), Luke Wallace (LW), Prof Rod Connolly (RC), Celine Roux (CR), Anthony Alback (AA), the Honourable Karen Andrews MP Shadow Minister for Home Affairs and Shadow Minister for Child Protection and the Prevention of Family Violence (KA), Nathan Fife (NF), Rod Brooks (RB), Hilary Jacobs (HB), Pearce Dougherty (PD), Gary Radcliff (GR), Cr Gail O'Neill (GO), Jeremy Wagner (JW), Matthew Moore (MM), John Drummond (JD), Stuart Black (SB).

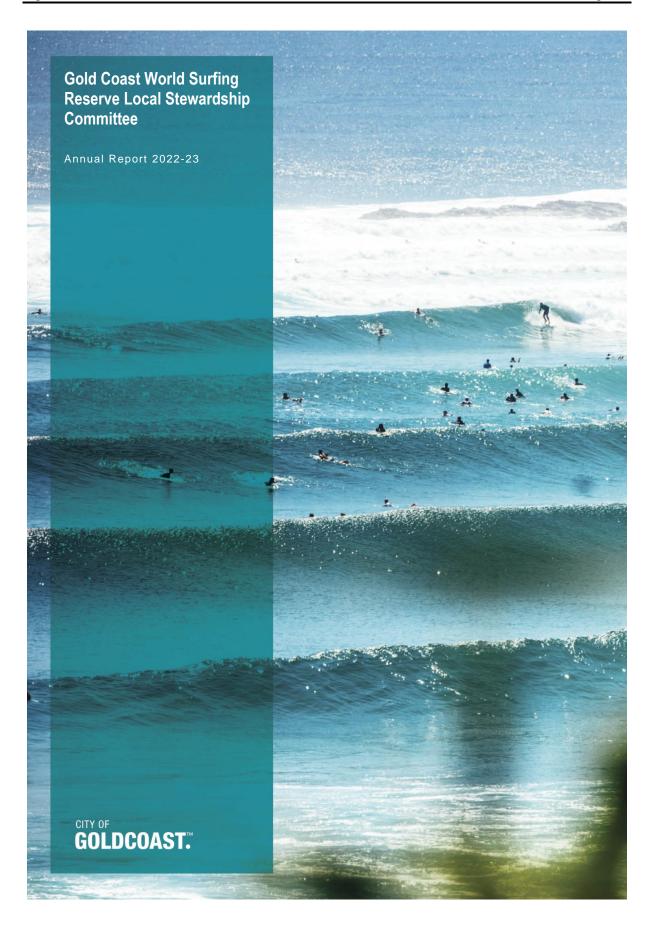
Item	Note		Recommendation/Comment	Due Date
1.	<ul> <li>Opening <ul> <li>PY opened the meeting and noted apologies</li> <li>SG provided a safety and integrity message</li> <li>PY motioned that the WSR LSC #8 meeting minutes were true and correct and this was seconded by CB</li> <li>SG noted actions arising from previous meeting #8 and recommended that the action requesting that current WSR LSC members identify potential candidates for LSC membership consideration remain open</li> </ul> </li> </ul>		Councillor Pauline Young confirmed previous minutes, seconded by Chris Butler	
2.	SMP implementation 2022/23			
	SG noted the Objective outcomes of the SMP	SG		
	<ul> <li>SG updated the committee on progress to progress the objective outcomes of the SMP throughout FY 2022/23</li> </ul>			

#A90866152

Item	Note	Action by	Recommendation/Comment	Due Date
3.	<ul> <li>World Surfing Reserve update</li> <li>SG updated the committee on the WSR Global Conference and thanked AM for his attendance and representation on behalf of the City at the conference.</li> <li>SG shared the Surf Amenity Climate Change Assessment Tool (SurfCAT) which was presented at the WSR Global Conference. SG noted that;         <ul> <li>The tool can be applied to the Gold Coast beaches to provide an overview on how the Gold Coast's surf amenity is placed to respond to Climate Change</li> <li>The tool is effective in communicating technical language into plain language and this may prove effective for stakeholder engagement with capital works taking place in the foreshore area</li> </ul> </li> </ul>	SG		
4.	<ul> <li>Planned FY23/24 SMP Implementation</li> <li>SG noted the planned activities for FY23/24 to progress the objective outcomes of the SMP</li> </ul>	SG		
5.	<ul> <li>Gold Coast World Surfing Reserve Annual Report 2022-23</li> <li>SG presented the draft GC WSR Annual Report</li> <li>PY called for LSC members to endorse the draft GC WSR Annual Report to be presented to Council for consideration</li> <li>Wayne Bartholomew endorsed the draft WSR LSC Annual Report which was seconded by Adam Yates.</li> </ul>	SG	Wayne Bartholomew endorsed the draft WSR LSC Annual Report which was seconded by Adam Yates.	
6.	<ul> <li>General Business</li> <li>Actions <ul> <li>SG to liaise with Andrew McKinnon regarding an application for grant funding to STW Coalition</li> <li>SG to follow up regarding maintenance schedule for WSR and NSR adornments at various locations</li> <li>SG to liaise with standing committee members regarding suitable proxy's and succession planning for members</li> </ul> </li> </ul>	SG		
9.	Meeting Close			

• PY closed meeting at 4pm

#A9086615	52			
Item	Note	Action by	Recommendation/Comment	Due Date



# GCWSR LSC – Annual Report

A88146767 V1 - Gold Coast World Surfing Reserve Local Stewardship Committee – Annual Report

### Contents

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4.	Gen	General Business (2022/23)				
5.	Surf	Management Plant Priorities for 2023/24	18			

A88146767 V1

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A88146767 V1 - Gold Coast World Surfing Reserve Local Stewardship Committee – Annual Report

### 1. Introduction

### 1.1. Purpose

The purpose of this report is to provide an update on progress towards implementing the key actions of the Surf Management Plan (SMP) throughout 2021/22 and outline priorities for progressing the SMP over the coming year (2022/23).

#### 1.2. Background

The Gold Coast has a global reputation as a centre of surf history and culture. Our coastline boasts world class waves comprising our famed right hand point breaks of the southern embayment to kilometres of beach breaks through the central and northern beaches. Our surf breaks contribute to the overall character of our suburbs, support our economy and our enviable Gold Coast lifestyle.



The Gold Coast has a long lineage of world surfing champions spanning decades. Pioneers like Phyllis O'Donnell, Peter Townsend and Rabbit Bartholomew paved the way for a new wave of World Champions including Mick Fanning, Joel Parkinson and Steph Gilmore whose careers thrived in the 2000's during the formation of "The Superbank", a welcome by-product of the Tweed Sand Bypass System.

The Gold Coast has also helped to shape the competitive arena within surfing, with the first 'man on man' event format being unveiled at the 1977 Stubbies event at Burleigh Heads which went on to become the standardised format for competitive surfing at all levels of the sport. We're recognised as a global epicentre for surfboard manufacturing, surf retail and sports administration. Brands such as DHD Surfboards and Billabong were founded on the Gold Coast and the World Surf League (WSL), Surfing Australia (SA) and Surfing Queensland (SQ) are headquartered on the Gold Coast.

Stephanie Gilmore recently won her  $8^{\mbox{th}}$  world title in the

WSL's new surf-off format, surfing her way from 5<sup>th</sup> in the world to become number 1 and in doing so, reinforced the influence of the Gold Coast on the global surfing stage.

#### 1.3. The Gold Coast Surf Management Plan and the World Surfing Reserve

On October 9<sup>th</sup>, 2015, a section of the city's coastline stretching from the Qld/NSW border in the South to Burleigh Heads in the North was approved as the 8<sup>th</sup> World Surf Reserve, with a dedication to the newly acquired status occurring on 8<sup>th</sup> March 2016. A requirement for each World Surfing Reserve (WSR) is the formation of a Local Stewardship Committee (LSC) and a site-specific stewardship plan.

The Gold Coast Surf Management Plan was adopted by Council on 11 September 2015 and acts as the local stewardship plan for the GCWSR. By adopting the SMP, the City became the first local government anywhere in the world to formally recognise the importance of surf amenity to the local community. The creation of the SMP reinforced the City's commitment to maintaining surf amenity through science, community input and effective management strategies. This accepted approach will ensure that the Gold Coast's surfing amenity is recognised and protected for generations to come.

A88146767 V1

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Report

A88146767 V1 - Gold Coast World Surfing Reserve Local Stewardship Committee - Annual Report

Each year, the City produces an annual report to Save the Waves Coalition (STW), a not-for-profit organisation based in the United States who governs World Surfing Reserves, on progress relating to implementation of the key actions of the SMP as well as planned activities for the coming year.



The Gold Coast World Surf Reserve area stretches from the Qld/NSW border in the South to Burleigh in the North.

#### 1.3 Policy Alignment

#### City Vision

Our City Vision, 'Inspired by lifestyle. Driven by opportunity' defines our longer-term aspiration for the Gold Coast. The City Vision informs strategic planning for the city, with the aim of protecting our enviable Gold Coast lifestyle and ensuring that future generations are proud to call the Gold Coast home.

#### Council Plan

The Council Plan contains six themes which support the implementation of the City Vision, and it describes the outcomes the City is working towards and the proposed measures of success. The six themes are 'Diverse Thriving Economy', 'Vibrant Lifestyle', 'Connected Community', 'Naturally Unique', 'Liveable Places' and 'One City'.

#### Ocean Beaches Strategy

The Gold Coast Ocean Beaches Strategy 2013-2023 is an overarching strategy that makes clear the need to manage the ocean beaches in consultation with a diverse group of stakeholders, delivering on all six themes of the Council Plan.

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## **GCWSR LSC – Annual Report**

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The Gold Coast Ocean Beaches Strategy 2013-2023 seeks to ensure the following:

- Everyone can enjoy a beach experience.
- Our beaches are healthy and clean.
- Our infrastructure is protected from coastal hazards.
- There is joint stewardship of the ocean beaches.

A key action within the OBS was to actively engage with surfers, surfing bodies, business and the broader community to develop a management plan that recognises and supports Gold Coast surf amenity. This led to the development of the Gold Coast Surf Management Plan.

#### Gold Coast Surf Management Plan (SMP)

The SMP contains 3 Objective Outcomes.



#### 2: Management of surf amenity on Gold Coast beaches is recognised as best practice and is informed by data collection, design and innovation.

The City of Gold Coast has been actively managing, monitoring and studying the coastline for decades. The City will continue to partner with leading research bodies and innovators to ensure that well-informed, best practice outcomes are achieved.



#### 1: Resident and visiting surf users who share Gold Coast beaches clearly understand local surf etiquette and surf safety customs.

We have a growing, diverse visitor and resident population and a limited number of beaches and surf breaks. It is important to make sure that all beach users understand the local surf etiquette and surf safety customs so that everyone can enjoy a beach experience.



# 3: There is joint stewardship in the management of Gold Coast surf amenity.

Visitors and residents of all abilities and backgrounds enjoy Gold Coast beaches. That is why it is important to have a coordinated approach to how we manage our beaches to ensure that everyone can enjoy their beach experience.

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### 2. Surf Management Plant Implementation 2022/23

Significant progress toward achieving the objective outcomes of the SMP has been made over the past year. This is outlined within section 2.

# Objective Outcome 1 - Resident and visiting surf users who share Gold Coast beaches clearly understand local surf etiquette and surf safety customs.

Safety for all ocean users remains one of the City's key priorities. Acknowledging that our recreational surfing population continues to increase and diversify reinforces the need for ongoing education for ocean users regarding correct surf safety and etiquette customs. The City has developed 'Good Surfer' surf safety and etiquette content to help mitigate against the increase in the number of recreational surfers, communicate local surfing customs and create a safer and more enjoyable surfing environment. 'Good Surfer' surf safety and etiquette content can be viewed on the City's Corporate website; https://www.goldcoast.gld.gov.au/Things-to-do/Gold-Coast-beaches/Surfing

# Key Action 1.1 - Develop and implement an engagement campaign relating to etiquette, safety and education as well as implementing strategies for minimising conflict between different user groups.

#### Achievements

'Good Surfer' comprises 7 digital animation videos which outline correct surf safety and etiquette customs. When presented to Council for endorsement, the content was praised for being informative and creating a 'sense of place' through connection to iconic locations within the Gold Coast.



Following the development of 'Good Surfer' content, the City has been able to promote surf safety and etiquette through the following channels:

- Integration within the live event broadcast of the 2022 WSL Challenger Series event at Snapper Rocks.
- Placement of all videos on the City website.
- Pilot of 'Good Surfer' content within Surfing Services Surf School (website & socials).
- Surf School forum conducted June 5<sup>th</sup>. Requested that surf schools integrate 'Good Surfer' within their participation waiver process as well as social integration.
- Surf World Museum integration 'Good Surfer' running on loop full time at entrance to Surf World Museum
- · City led social campaign resulted in (results outlined below)

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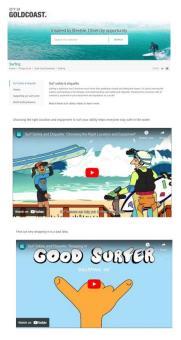


# **GCWSR LSC – Annual Report**

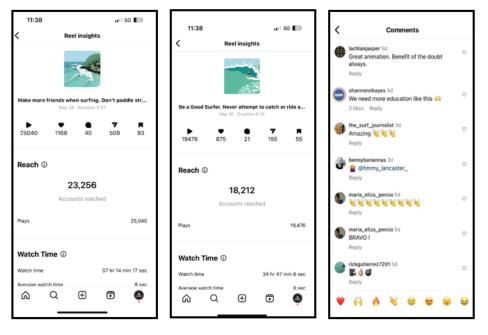
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- Surfing Queensland digital integration dedicated web page, socials, Electronic Direct Marketing (E-Newsletter).
- 1000 Good Surfer booklets printed and distributed to Surf Schools for trial use.

Good Surfer City website integration (below)



Results from social integration via Surfing Queensland (below)



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# **GCWSR LSC – Annual Report**

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Good Surfer – City led Social Media Campaign (April – June 2023).

- 296,198 people reached (total number of people who see the content).
- combined 915,448 impressions (number of times post has been displayed).
- 62,305 post engagements (saves, likes, shares, comments 3-second video plays etc.) at a post engagement rate of 6.81% (total engagement measured against impressions).
- best performing videos 1. Beware of other craft 2. Board control and use of leg rope 3. Dropping in 4. Snaking.

Demographics engagement and Analytics example



Example of Surfing Queensland Electronic Newsletter feature stories reaching a database of 6000 people each article. There were 7 newsletter articles in total.



If you're starting your surfing journey, chances are you may be surfing on the wrong equipment at the wrong location, which can be unsafe for yourself and others. To help keep everyone safe, the City of Gold Coast (COGC) developed 'Good Surfer'. Here's some helpful tips for those learning to surf.

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#### 'Good Surfer' - surf safety and etiquetee booklet

1100 booklets have been printed and distributed to Surf Schools.



'Good Surfer' Surf Etiquette Signage Upgrade

The City used 'Good Surfer' content within an update and relocation of our existing surf etiquette signs.



Examples of surf safety and etiquette signage (before and after upgrade and relocation)

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# Objective Outcome 2 - Management of surf amenity on Gold Coast beaches is recognised as best practice and is informed by data collection, design and innovation

Key Action 2.1.1 – In line with the reporting requirement of the Surf Management Plan, this action plan will be reviewed every five years. Through this exercise, there will be a worldwide analysis of surf amenity enhancement and preservation initiatives.

- The City completed a review of the SMP. Results stemming from the technical review of surf amenity combined with an analysis of issues affecting surf amenity informed the new action plan for the SMP. (Attachment 1). The SMP Five Year Review process included preparation of a draft review, stakeholder engagement via the WSR LSC and preparation of a final report which was endorsed by the LSC and subsequently endorsed by Council.
- A summary of SMP Five Year Review was produced.

#### Key Action 2.1.2 -

# Support a dedicated digital platform which provides local surf forecast and coastal monitoring covering Gold Coast beaches. Incorporate features which educate the community and enhance the beach user experience.

Our City Lifeguard service monitors our beaches via a central command of beach cameras which helps to ensure that our beaches are safe for all beach users. The City is investigating the development of a digital platform (app) which allows our community to access 'real time' beach cameras and weather-related content. This offering has numerous benefits to the community:

- the community can make informed decisions around their beach user experience
- real time assessment of ocean conditions
- real time assessment of beach crowding
- access to wind, weather and swell data (updated hourly)
- embed 'pre-roll' content such as 'Good Surfer' and coastal management information into live camera feeds .

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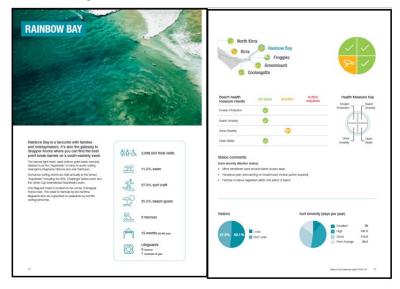
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#### Key Action 2.1.3

# The City will publish summary data relating to coastal management and will produce an annual 'State of the Beaches' report.

The purpose of the State of the Beaches Report (SBR) is to provide an overview of Gold Coast beaches and demonstrate the City of Gold Coast's (City) role as it relates to coastal management.

- The State of the Beaches Report includes an overview of beach health, usage, amenities and experiences provided to our community via our beaches.
- Results from the SBR enable the City to prioritise areas for investment and monitor the effectiveness of management actions.



Example 'report card' from the 2022-23 State of the Beaches Report

The 2022-23 Sate of the Beaches Report is scheduled to be presented to Council in September. Once endorsed, a copy of the SBR will be placed on the City website.

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# **GCWSR LSC – Annual Report**

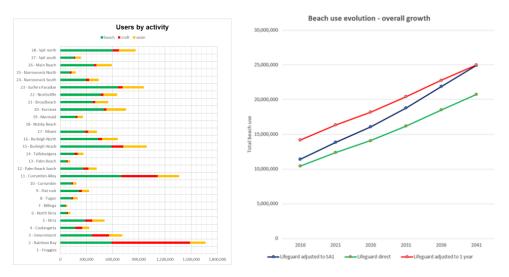
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#### Key Action 2.1.4 -

The City continues to collect and analyse surf user population data at surf breaks on Gold Coast beaches (i.e., numbers, peak times, peak locations, etc.) for the purpose of informing future investments.

### Achievements

Recently, City Lifeguards have transitioned from a paper-based data collection to a cloud-based data collection and lifeguards will receive training to enhance the capabilities of the new system. Lifeguard counts will be verified against other collection methods to help to confirm accuracy. The City is also developing a method to rationalise data collection which will inform levels of service and infrastructure investment to enhance the level of service on our beaches. Surf amenity will be key consideration within this work.



Current year data segmentation by activity (Left), Overall beach user trends and range of projections based on linear population growth and measurement techniques (Right)

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Key Action 2.1.5 - The City continues to invest in coastal monitoring having regard to budget priorities.

#### Achievements

The City is considering findings from a whole of coast study into surf amenity enhancement opportunities for the Gold Coast.



Key Action 2.1.6 - The City continues to invest in coastal monitoring having regard to budget priorities.

#### Achievements

- Smart cameras are located at several locations and are used to track beach user numbers. In
  addition, the trial of drone technology has been used to quantify beach user numbers and usage
  patterns by Griffith University. This data helps to inform the City's asset and service planning to
  enhance the beach user experience.
- The City has begun a study into the Total Economic Value (TEV) of our beaches. The results of this study, due in the 23/24 Financial Year, will help to shape investment priorities within our beaches. Surfing amenity will be considered within coastal management activities.
- The City is currently investigating options for measuring surf amenity at various locations. Quantifying surf amenity will enable the City to identify changes in surf amenity and allow the City to develop responses to emerging issues relating to surf amenity.

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Ongoing monitoring of beach width at different ETA lines allows us to track, prepare for and mitigate coastal erosion risks and manage how vulnerable areas of beach are used to prioritise beach health.

# Key Action 2.2.1 In line with the reporting requirement of the SMP, the social and economic contribution of surf amenity be reviewed and reported on every five years in consultation with key stakeholders.

Surfing has played a defining role in shaping the Gold Coast's identity as a global surfing destination, with residents and visitors alike drawn to the area for the high quality of its natural amenity, its unique lifestyle and its renowned surfing culture and history.

In 2020 the City commissioned a study to determine the economic and social value of surfing to the Gold Coast.

#### **Key Findings**

Surfing On the Gold Coast

- The Gold Coast has the most active surfers per capita in the world.
- The Gold Coast is a consistently popular destination for visiting surfers.
- Surfing is very important to Gold Coast residents.

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#### Economic Contribution of Surfing on The Gold Coast

- In 2019 the overall value-added contribution from surfing was \$542.70 million. This is 1.5% of Gold • Coast GRP.
- The largest contributions to the GRP are from the surf related retail trade (\$224.81), accommodation and food service sectors (\$96.88).
- In 2019, surfing contributed to 6,348 jobs which represented 2.6% of the total jobs in the Gold Coast. .

Table A.1 - Overall economic contribution of surfing activity to the Gold Coast in 2019

	Direct and Supply-Chain Value-Added (\$m)	Direct and Supply-Chain Employment (Jobs)				
Surfing Related Activity	\$542.70	6,348				
Gold Coast Overall	\$35,572.19	246,696				
Proportion of Gold Coast	1.5%	2.6%				
Source: REMPLAN and Urbis calculations						

Figure A.1 - Direct contributions of surfing to economic output (sales/turnover) by industry sector (\$m)

	\$0 \$	50 \$	100	\$150	\$200	\$250	\$300	\$350	\$400
Retail Trade								\$	355.06
Accommodation & Food Services						\$230	.05		
Wholesale Trade		\$6	1.43						
Transport		\$50	.64						
Sports & Recreation		31.62	2						
Manufacturing	\$1	7.18							
Heritage, Creative & Performing Arts	\$10	.46							
Information Media & Telecommunications	\$1.9	8							
Education & Training	\$1.3	6							
Source: DEMDLAN and Linkia colouilations									

Source: REMPLAN and Urbis calculations

#### Surfing's Social Contribution to the Gold Coast

- In addition to providing economic benefits, the report found that surfing continues to play an • important role in the Gold Coast lifestyle Health & Wellbeing industry is strongly linked to surfing as well as the positive social capital of a community.
- Mental health, stress relief, connection to nature and a sense of freedom are all related benefits of surfing.
- 71% of survey participants reported that time with friends was an important benefit of surfing. .
- 62% the sense of community that exists within surfing was an important benefit.

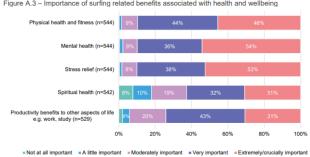


Figure A.3 - Importance of surfing related benefits associated with health and wellbeing

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# Objective Outcome 3 - There is joint stewardship in the management of Gold Coast surf amenity.

Visitors and residents of all abilities and backgrounds enjoy Gold Coast beaches. That is why it is important to have a coordinated approach in how we manage our beaches to ensure that everyone can enjoy their beach experience. The SMP ensures that surf amenity continues to be given a consideration in all decisions relating to our coastal environment and that the process is communicated effectively to the community.

The SMP also helps the community and various levels of government work cohesively to preserve and enhance where possible, the exceptional surfing experience the Gold Coast offers.

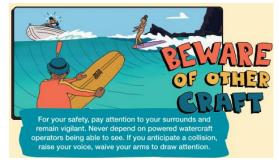
# 3.1 The City investigates measures to raise awareness of surfer safety at the entrance to Currumbin Estuary.

#### Achievements

The City has developed digital animation content which is designed to specifically address:

- The safety of surfers who use coastal bars and navigation channels as part of their activities. The animation contained tips for surfers and boaties to help avoid conflict between different ocean users.
- Surf etiquette signage updated to highlight the issue of user conflict. Including QR code technology is designed to direct visitation to the City's surf safety and etiquette page.





#### 3.2 City recognition of surf amenity Achievements

The City recognises surfing amenity in various ways. Via the Ocean Beaches Strategy, the City developed the SMP, a first of its kind for a local government to formally recognise the importance of surf breaks to the local community. The southern Gold Coast became the eighth World Surfing Reserve and the SMP became the Local Stewardship Plan which is overseen by a Local Stewardship Committee. The WSR dedication is commemorated by an adornment at Kirra Point. Recently, the City updated Qty three surf etiquette signs by integrating 'Good Surfer' digital animation artwork and QR code links to the City website.

Additionally, the City is managing various large scale capital projects which take place within our beaches and foreshore areas. Surf amenity is considered within new/upgrades of capital works projects.

For oversight within the LSC, several coastal management projects are outlined below.

- 1: Surfers Paradise Sand Backpass Project
- 2: Currumbin South Training Wall upgrade
- 3: Tomewin St Seawall and placemaking

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World Surfing Reserve Local Stewardship Committee Annual Report

## 3. Gold Coast World Surfing Reserve Local Stewardship Committee Annual Report

### Achievements (22/23)

- The GC WSR Annual Report draft was presented to and was endorsed by LSC members prior to being endorsed by Council (G22.1202.028).
- The annual report was sent to STW as per the Terms of Reference of the World Surfing Reserve Local Stewardship Committee (WSR LSC).

### 4. General Business (2022/23)

### 4.1 World Surf Reserve Global Conference



#### Achievements

Save the Waves Coalition hosted a WSR summit (June 7<sup>th</sup>-9<sup>th</sup>, 2023) in Santa Cruz, USA. Andrew McKinnon was chosen to present on behalf of The City and the GC WSR. The presentation informed the global WSR community on progress implementing the objective outcomes of the SMP and included an assessment of how the City is positioned to respond to the effects of climate change on surf amenity.

The City would like to acknowledge the work of Andrew McKinnon within the representation of the City at the global WSR conference. At its heart, this type of collaboration demonstrates the positive outcomes which can be achieved through joint stewardship of key stakeholders.

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### 5. Surf Management Plant Priorities for 2023/24

The City intends on implementing various activities throughout FY 23/24 to progress the objective outcomes of the SMP. Details of planned activities are outlined below.

# Objective Outcome 1 - Resident and visiting surf users who share Gold Coast beaches clearly understand local surf etiquette and surf safety customs.

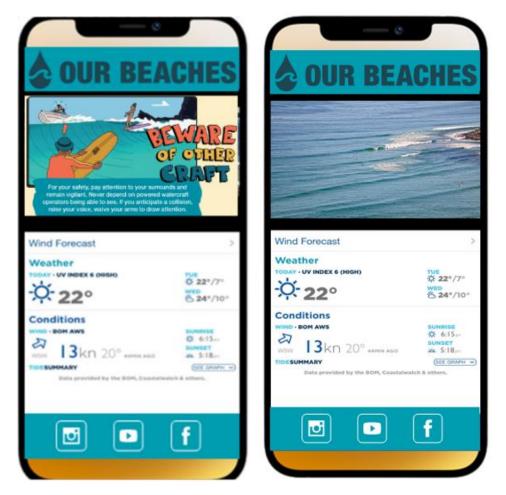
The City is proposing the following actions to progress SMP objective outcome 1.

#### **Our Beaches App Integration**

The City is investigating the development of a mobile app which offers the community access to live beach camera access. Within the proposed offering is the integration of 'Good Surfer' content as pre-roll for users accessing live beach cameras. This allows the City to continue achieving objective outcome 1 of the SMP.

Surf Safety Pre-Roll

Live Cams & Weather



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#### Track & Monitor the Success of Surf Etiquette signage

- The City will measure the success of updated surf etiquette signs by tracking digital video views resulting from scanning QR codes.
- The City will consider additional surf etiquette signs at prominent Gold Coast surfing locations .

#### Language Translation of 'Good Surfer' collateral

 The Gold Coast is a global tourist destination and home to surfers from a range of nationalities. The City recognises that many visitors don't understand local surf safety and etiquette customs and will investigate the viability of creating 'Good Surfer' content which contains translated subtitles, voice overs and translation pathways from QR codes available on 'Good Surfer' signage.

#### Surf School Integration and Monitoring

- The City will collaborate with licensed surf schools to integrate 'Good Surfer' animation videos within the participation waiver process as well as social media accounts.
- The City will monitor the success of 'Good Surfer' booklets within licensed surf schools by regulating and tracking the number of booklets distributed by each surf school.
- The City will measure the success of digital assets within surf schools by collecting metrics from each surf school's social media platforms and booking system integration.

#### **Education Curriculum Integration**

• The City will investigate opportunities to integrate 'Good Surfer' within high school curriculum.



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# Objective Outcome 2 - Management of surf amenity on Gold Coast beaches is recognised as best practice and is informed by data collection, design and innovation

The City is investigating the development of a mobile app which offers the community access to live beach camera access. This will enable the City to progress SMP key action 2.1.1.

Key Action 2.1.1 – Support a dedicated local surf forecast and real-time coastal monitoring website covering Gold Coast beaches. The website will also make recommendations based on the current conditions and users skill level.



The proposed mobile app would benefit the Gold Coast surfing community by.

1: offering live beach cameras, swell, wind and weather to enable beach users to make informed decisions around their beach experience.

2: further promoting "Good Surfer" safety and etiquette content pre-roll on free surf cams.

3: displaying beach closure information, warnings and alerts and community education around coastal management activities undertaken by the City.

### 2.1 Coastal Surf Amenity Quality Monitoring

Palm Beach Reef Monitoring

As part of the Palm Beach Shoreline Project, the City monitors the Palm Beach Reef to track safety and performance metrics.



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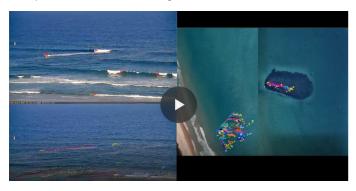


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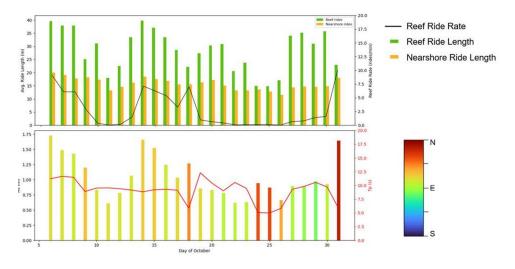
#### Wave Peeling Technology

Wave Peel Technology is used to monitor wave quality at the Palm Beach Reef.

"To provide quantifiable results, the City is utilising wave peel tracking (WPT) a new novel approach to analyse surf amenity (Thompson et al, 2021). This methodology tracks each individual wave peel to produce surf metrics including percentage of surfable waves, surfable days per week, ride length, ride duration and ride speed." – Senior Coastal Engineer, CoGC



Tracking the wave peel and comparing this to established measures to define wave quality means the City can analyse data to draw conclusions about factors that affect surf amenity quality.



"The idea is to be able to quantitively and objectively count waves and assess surf ride quality, so we can track over the years any changes that might be related to either climate patterns or seabed morphodynamic patterns related to either natural or artificial sediment transport processes." – Senior Coastal Engineer, COGC

#### WSR and Wave Peel Technology

Data collection and analysis help to inform coastal management strategies to preserve and enhance the surf amenity of the Gold Coast. Baselining surf amenity positions the City to identify threats and opportunities to help to ensure that surf amenity is protected and enhanced where possible.

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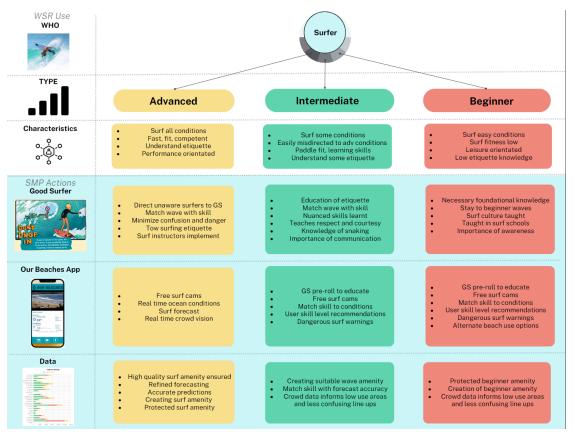
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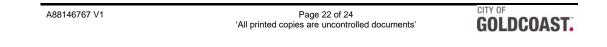
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# Objective Outcome 3 - There is joint stewardship in the management of Gold Coast surf amenity.

The management of surf amenity involves a diverse group of stakeholders. The City recognises the need for an increased focus on interdependencies and acknowledges that there is further opportunity to align and integrate programs and projects to improve outcomes for the community. Taking a holistic view of the surfing landscape will allow the City to identify threats and opportunities which will help to ensure that the surf amenity of the Gold Coast is protected and enhanced for future generations. Understanding that participants may be in different cycles of their surfing journey allows the City to tailor strategies which can deliver tangible benefits to the surfing community.

The table below demonstrates various segments of the recreational surfer market and applies City led activities which can be targeted to specific demographics of recreational surfers.



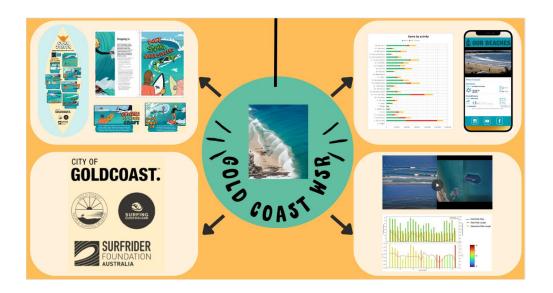


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The table below illustrates the role that the World Surfing Reserve plays within the overall management of surf amenity on the Gold Coast within the context of the Local Stewardship Committee overseeing the implementation of actions within the local stewardship plan (SMP).



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Report

FOR MORE INFORMATION



#### Attachment 3

#### Ex minute No. TI22.0712.004

1 That Council notes the contents of this report.

2 That Council endorse the proposed draft Surf Management Plan Five Year Review Report and commencement of targeted stakeholder consultation through the World Surfing Reserve Local Stewardship Committee.

3 Following consultation with the World Surfing Reserve Local Stewardship Committee, a final version of the SMP Five Year review will be presented to Council for consideration and endorsement.

#### **RESOLUTION G22.0725.025**

Moved: Cr PC Young Seconded: Cr D Taylor That Committee Recommendation TI22.0712.004 be adopted.

#### Ex minute No. TI22.0301.004

1 That Council notes the contents of this report. 2 That Council endorse the submission of the Gold Coast World Surfing Reserve Local Stewardship Committee Annual Report 2020-21 (Attachment 3) to the Save the Waves Coalition. **RESOLUTION G22.0315.024** Moved: Cr PC Young

Seconded: Cr G Tozer That Committee Recommendation TI22.0301.004 be adopted.

#### Ex minute No. TI21.0713.006

1 That Council notes the contents of the report.

2 That Council endorse the submission of the attached annual report to Save the Waves Coalition (Attachment 7.2).

#### Ex minute No. G20.1027.011

1 Council notes its strong opposition to any changes to the Gold Coast World Surfing Reserve outside of its ceremonial designation.

2 That the City prepare a submission reflecting this position and canvassing all other risks and matters that may be prejudicial to the ratepayer to the State Governments Protections for World Surfing Reserves in Queensland consultation for consideration at the next Transport & Infrastructure Committee on 12 November 2020.

#### Ex minute No. G17.1031.007

1 That Attachment 3.5 be deemed a confidential document in accordance with sections 171 (3) and 200 (5) of the Local Government Act 2009 and that the attachment remain confidential unless Council decides otherwise by resolution.

2 That Council endorse the submission of the attached annual report to Save the Waves Coalition.

3 That Council endorse the minor amendments to the World Surfing Reserve Local Stewardship Committee Terms of Reference (Attachment 3.4) including the proposed changes to the representatives as noted in Table 1.

#### Ex minute No. G16.0129.028

1 That Council adopts the attached charter and terms of reference, including the proposed representative committee chairmanship, membership and outlining the context, objectives, scope, roles and responsibilities.

2 That Council notes the date of the first Local Steward Committee meeting is Tuesday, 2 February 2016 at 5.30pm and the date of the World Surfing Reserve dedication ceremony is Tuesday, 8 March 2016 at 8.30am.

#### Ex minute No. G15.1211.044

1 That the Mayor oversee the establishment of the World Surfing Reserve Local Stewardship Committee (LSC) within the following parameters: a to assist with the dedication ceremony;

b to report annually to the Save the Waves Coalition on progress towards implementing the SMP insofar as it relates to the southern Gold Coast WSR;

c involving the members of the Surf Management Plan Advisory Committee.

2 That Council approves the allocation of \$14,000 from the Division 14 local area works budget for the establishment of a WSR commemorative plinth and plaque at Snapper Rocks, and the allocation of \$6,000 for catering and related costs for a dedication ceremony from project number 1007493.

#### Ex Minute No. G15.0911.036

1. That Council supports the proposal of Gold Coast World Surfing Reserve Inc to nominate the Gold Coast beaches from Burleigh Heads to Snapper Rocks as a World Surfing Reserve, subject to the following criteria being clearly stated in the nomination submission. a That the City of Gold Coast Surf Management Plan is the endorsed strategy for the management of the City's ocean beaches.

b That the World Surfing Reserve status does not fetter the rights and obligations of the City of Gold Coast in exercising its responsibilities.

c That the World Surfing Reserve status does not impinge upon the rights of other users of the beaches including swimming, surf lifesaving, fishing, recreational boating, and other water craft. 782nd Council Meeting 12 November 2019 34 Transport And Infrastructure Committee Meeting 31 October 2019 Adopted Report

d That the local stewardship committee for the World Surfing Reserve is to be determined by Council and involving members of the City's Surf Management Plan Advisory Committee. e That the World Surfing Reserve status will not be used to lobby for any changes in legislation, either local, state or federal.

f That the City's endorsement of the World Surfing Reserve nomination is on the basis that the title is purely ceremonial only in nature.

g That the City reserves the right and discretion to withdraw its support for the World Surfing Reserve status if any of the above criteria are not met or maintained to its satisfaction. 2 That the Chief Executive Officer write to the Gold Coast World Surfing Reserve Inc committee to advise it of Council's decision.

# 6.4 UPDATE ON PROTECTIONS FOR QUEENSLAND'S WORLD SURFING RESERVES

Objective ID:	A93047407		
Author:	Liam De Lucia, Coordinator Beaches, City Assets		
Authoriser:	Cath Drinkwater, Director Transport and Infrastructure, Transport and Infrastructure		
Attachments:	1 Draft Protection Policy for Queensland's World Surfing Reserves		
	2. Draft Gold Coast and Noosa World Surf Reserve Maps		

#### 1 PURPOSE OF REPORT & DISCUSSION

The purpose of this report is to provide an update to Council on Protections for World Surf Reserves currently being progressed by the State Government's inter-departmental working group.

On 14 September 2023, City Officers attended the 4th Ministerial Surfing Roundtable, the first Ministerial Surfing Roundtable meeting since 16 March 2021.

At the 4th Ministerial Surfing Roundtable, representatives from the Department of Tourism, Innovation and Sport, the Department of Environment and Science and the Department of State Development, Infrastructure, Local Government and Planning presented a Draft Protection Policy for Queensland's World Surf Reserves (the Draft Policy).

The Draft Policy is provided for information in Attachment 1 with draft maps of the World Surf Reserve area provided in Attachment 2.

The Draft Policy proposes amendments to <u>State Code 8</u> which would require consideration of impacts to Surf Amenity in Queensland's World Surf Reserves. State Code 8 is the code that is utilised for the assessment of operational works approvals for Coastal development and tidal Works.

Representatives from the inter-departmental working group have been invited to present the Draft Policy. The intent of this is provide Council an opportunity to raise any queries it has regarding the Draft Policy.

The intergovernmental working group has requested that the City provide formal feedback on the Draft Policy by 10 November 2023. City officers are currently undertaking engagement with internal and external partners to ascertain any potential risks to the City's coastal management operations.

#### 2 COORDINATION & CONSULTATION

Name and/or Title of the stakeholder consulted	Directorate or organisation	Is the stakeholder satisfied with the report and recommendations (Yes/No) (comment as appropriate)
Director Transport and Infrastructure – Cath Drinkwater	Transport and Infrastructure	Yes
Manager City Assets – Jeremy Wagner	Transport and Infrastructure	Yes

#### 3 **RECOMMENDATION**

It is recommended that Council resolves as follows:

That Council notes the contents of this report.

# Draft Protection Policy for Queensland's World Surfing Reserves

For consultation purposes –

#### not government policy

World Surfing Reserves are globally significant surfing sites, or those with an outstanding series of surf breaks. World Surfing Reserves are designated by Save the Waves Coalition, a non-government organisation, and are located in a range of countries around the world. Each World Surfing Reserve is required to establish a local stewardship committee and stewardship plan to support management of the reserve.

As at 2023, there are two dedicated World Surfing Reserves in Queensland, at the Gold Coast and Noosa. The Yugambeh People are the Traditional Owners of the Gold Coast, with the Kabi Kabi First Nations People the traditional custodians of the land located in Noosa, Sunshine Coast, parts of Moreton Bay and Gympie.

The Gold Coast World Surfing Reserve extends from Burleigh Beach to the Queensland border with New South Wales and 500 metres seaward from the low tide water mark. The Noosa World Surfing Reserve area generally covers the point breaks from Laguna Bay on Noosa Main Beach to the beach break at North Sunshine Beach (see attached maps).

The social, economic and health benefits of surfing are far-reaching for coastal communities. As an increasingly global mainstream sport, Queensland attracts high-profile professional surfing competitions and events which support local tourism and inspire physical activity. According to the Saves the Waves Coalition, the roots of surfing are said to date back before European settlement with the Traditional Owners the first to have surfed the shores with canoes, wooden body boards and raft creations.

A key threat to the surfing waves (i.e., surf amenity) of an area is development that affects waves approaching the coast or the shape of the ocean bed that causes waves to break and form a surfable wave. Protecting Queensland's World Surfing Reserves from development that could disrupt the normal flow of sand along the coast or change sand bank forms will ensure these sites remain iconic and favoured surfing destinations into the future.

The Queensland Government undertook a comprehensive review of current regulatory frameworks that provide a range of protections for Queensland's existing World Surfing Reserves such as the *Environment Protection and Biodiversity Conservation Act 1999, Nature Conservation Act 1992, Marine Parks Act 2004* and the *Coastal Protection and Management Act 1995* as well as other legislation that could potentially enhance protections, such as the *Queensland Heritage Act 1992* and *Aboriginal Cultural Heritage Act 2003.* Consideration was also given to non-legislative options such as behavioural and cultural change campaigns.

Following this review, it was determined that a dedicated Queensland Government Protection Policy, given effect through amendments to the State Development Assessment Provisions under the *Planning Act 2016*, would be the most effective mechanism to address development assessment gaps while achieving regulatory simplicity. This approach is consistent with other Queensland Government approved policy positions which are given effect through legislative amendments.

FOR CONSULTATION - NOT GOVERNMENT POLICY



#### **Protection policy**

The diverse nature of surfing and its value to the community contribute to the liveability and prosperity of our communities. The Queensland Government is committed to protecting surf amenity at Queensland's World Surfing Reserves by protecting these areas from development which may adversely affect the character of surf breaks such as those that:

- transform, or impede waves in, or approaching, a mapped World Surfing Reserve;
- change the seabed level or sandbanks in, or near, a mapped World Surfing Reserve;
- change the movement of sand into, along or out of, a mapped World Surfing Reserve; and
- change wind patterns that would adversely affect wave development in a mapped World Surfing Reserve.

The Queensland Government acknowledges the expertise and the existing role of local governments to manage, protect and regulate a range of attributes of their respective World Surfing Reserves. This policy is therefore not intended to affect, reduce or remove any existing local government powers, including those in local government planning schemes, strategies and local laws designed to:

- manage coastal areas including beach and surf amenity, for example by creating artificial reefs and beach nourishing activities;
- protect private property or prevent coastal erosion, including through the construction of sea walls or groynes;
- manage the landward side of a World Surfing Reserve; and
- protect public safety and manage public activity.

#### Implementing the protection policy

Under the Queensland planning framework, the use and development of land is generally regulated by local governments. Local governments decide which type of development needs to be assessed as well as the requirements that a proposed development must be assessed against.

However, additional assessment is sometimes required for matters of state interest or when the area may fall outside of the local government's jurisdiction. When this occurs, the State of Queensland becomes involved as the assessment manager or as a referral agency through the State Assessment Referral Agency (SARA).

The State has an interest in assessing tidal works or works in a coastal management district. Development in tidal water, including structures, dredging, sand placement or dumping of waste material currently triggers assessment by SARA under the <u>State Development</u> <u>Assessment Provisions</u>, specifically *State Code 8 – Coastal development and tidal works*.

It is acknowledged that the current development assessment framework under State Code 8 provides a level of protection for Queensland's existing World Surfing Reserves including for protection of coastal processes, water quality and foreshore vegetation.

However, it is proposed to amend State Code 8 to include new provisions which outline specific assessment benchmarks that a development application must be assessed against. These specific benchmarks would require development, other than coastal management works, to not result in an adverse impact on a surf break in a mapped World Surfing Reserve and would complement the existing provisions in State Code 8 that apply to development that is tidal works or work in a coastal management district.

It is intended the new provisions under State Code 8 will provide an assessment framework that will apply to future development in the Gold Coast World Surfing Reserve, Noosa World Surfing Reserve as well as any future sites that might be declared and mapped as World Surfing Reserves in Queensland.

FOR CONSULTATION - NOT GOVERNMENT POLICY



Existing provisions within State Code 8 will otherwise remain unchanged and will continue to ensure that all development, whether within or outside of a World Surfing Reserve, is assessed for impacts that may change coastal processes, destroy or adversely alter coastal resources (including ecosystems), worsen coastal erosion, pollute the water, privatise the coast and restrict public access.

This policy is not intended to limit the undertaking of coastal management works that aim to maintain or enhance the character of the coast, protect the coast from sea erosion, maintain navigational safety, provide flood mitigation, or other works prescribed by legislation. However, it is critical that coastal management works minimise adverse impact on a surf break in a mapped World Surfing Reserve.

World Surfing Reserves will continue to be available for community uses including swimming, surf lifesaving, fishing and boating.

FOR CONSULTATION – NOT GOVERNMENT POLICY



## **APPENDIX**

## Draft Protection Policy for Queensland's World Surfing Reserves - History and background

#### For consultation purposes – not government policy

#### Save the Waves Coalition

Save the Waves Coalition is a non-government organisation responsible for proactively identifying, designating and preserving the intrinsic environmental, cultural, heritage, sporting, recreation, economic and community value of surfing habitats around the globe, including through the designation of World Surfing Reserves.

World Surfing Reserves are selected based on the following criteria:

- **quality and consistency of the waves**: including characteristics of the waves such as their variety, the number of surfable days per year and the existence of Pro contests at the site
- **environmental characteristics**: including recognised biodiversity hotspots, existence of threatened species, undeveloped areas, providing key ecosystems services, and clear avenues for legal protection
- **culture and surf history**: including areas of national cultural importance, important surf history, and sites of regional importance
- governance capacity and local support: including sustainable financing opportunities, legal or policy frameworks available for protection and/or long-term support, clearly identified reserve ambassadors, capable community leaders and established institutions dedicated to ongoing World Surfing Reserve management and coordination.

As at 2023, there are 12 designated World Surfing Reserve sites located across Australia, the United Kingdom, Portugal, Chile, Peru, Costa Rica, Brazil, Mexico and the United States.

#### <u>Queensland Government commitments to enhance protections at Queensland's</u> <u>World Surfing Reserves</u>

In the lead up to the March 2020 Currumbin by-election, a commitment was made to "work with community to consider legislation to protect Queensland's two World Surfing Reserves at Noosa and the Gold Coast."

For the October 2020 state election, a new commitment was made to "develop legislation to give strong and lasting protections to the World Surfing Reserve from Burleigh down to Snapper Rocks."

#### Ministerial Surfing Roundtable

In early 2020, the then Minister for Sport established a Ministerial Surfing Roundtable (Surfing Roundtable) to address the first election commitment. The Surfing Roundtable comprises representation across relevant Queensland Government agencies, local governments, surfing organisations, First Nations' peoples and World Surfing Reserve local stewardship committees.

FOR CONSULTATION - NOT GOVERNMENT POLICY



On 4 March 2020, the first Surfing Roundtable was held whereby members agreed to prepare a discussion paper for community consultation outlining key issues. Existing regulatory frameworks at Commonwealth, state and local government levels largely protect World Surfing Reserves in Queensland, however, Roundtable members identified a possible gap in the assessment of development impacts on surfing waves.

On 27 August 2020, a second Surfing Roundtable was held where members collaborated to finalise a discussion paper that guided community and stakeholder consultation on the values of Queensland's World Surfing Reserves.

Stakeholders were invited to provide feedback on:

- what values are important in Queensland's World Surfing Reserves
- key threats these areas may face
- how we can ensure the waves and surrounding areas are protected into the future.

Between 2 October and 30 November 2020, the Queensland Government undertook community consultation through the release of the *Protections for World Surfing Reserves in Queensland – discussion paper*. The consultation process attracted 86 responses including 72 online survey responses and 14 written submissions from a range of community and industry stakeholders.

Consultation results revealed a desire to protect Queensland's World Surfing Reserves from environmental damage, future development and increased population, as well as support for preserving the cultural values of both First Nations peoples and surfing heritage. A consultation snapshot was shared with Roundtable members and is also available on the Department of Tourism, Innovation and Sport's <u>website</u>.

On 16 March 2021, a third Surfing Roundtable meeting was held to discuss the results of consultation and potential next steps. Roundtable members committed to further investigate legislative and non-legislative options, in collaboration with relevant government, community and industry stakeholders, to enhance protections for World Surfing Reserves in Queensland, where needed.

Undertaking consultation, releasing the results of consultation and holding the third Roundtable satisfied the March 2020 election commitment.

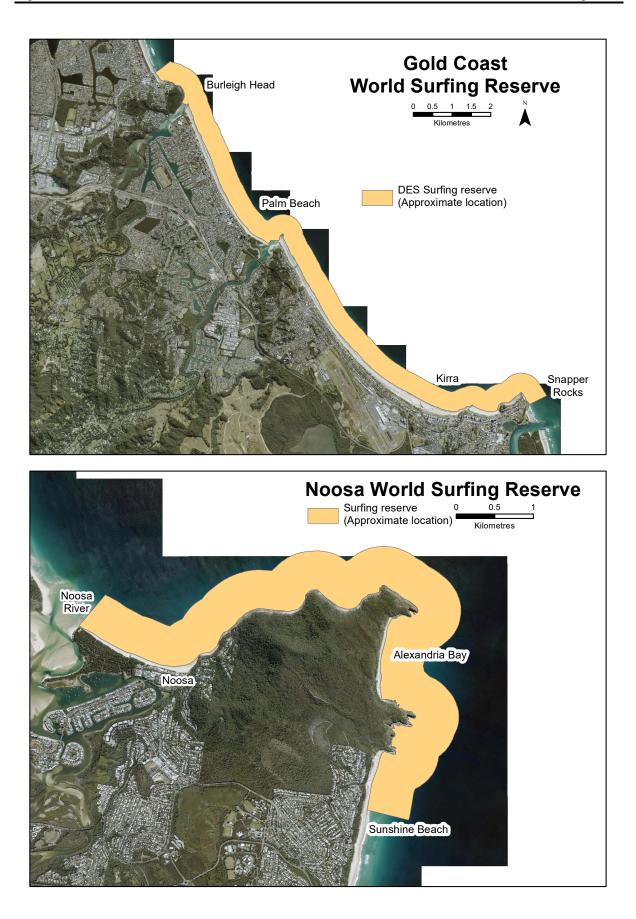
#### Queensland Government interagency working group

A Queensland Government interagency working group (the Working Group) was established to develop a draft protection policy as well as consider amendments to the State's planning framework to enhance protections at Queensland's World Surfing Reserves. The Working Group comprises representatives from the Department of Tourism, Innovation and Sport, the Department of Environment and Science and the Department of State Development, Infrastructure, Local Government and Planning given the policy overlaps and technical expertise of these agencies. Other relevant agencies attend Working Group meetings as required.

Following consultation on the draft protection policy, it is anticipated the Working Group will finalise the policy for Queensland Government consideration by the first half of 2024, subject to the outcomes of consultation with the Surfing Roundtable.

FOR CONSULTATION - NOT GOVERNMENT POLICY





#### 6.5 FERRY SERVICE PATRONAGE UPDATE

Objective ID:	A90149768		
File Number:	TT/TT131/268		
Author:	Sarah Yarrow, Senior Project Officer - Transport Partnerships, Transport and Traffic		
Authoriser:	Cath Drinkwater, Director Transport and Infrastructure, Transport and Infrastructure		
Attachments:	1 <u> </u> Previous Council Resolutions		

#### 1 BASIS FOR CONFIDENTIALITY

Not applicable.

#### 2 EXECUTIVE SUMMARY

Not applicable.

#### 3 PURPOSE OF REPORT

The purpose of this report is to provide an update on the patronage for the City sponsored ferry service named HOPO (Service).

#### 4 PREVIOUS RESOLUTIONS

Previous Council resolutions relating to the Service are outlined in Attachment 1.

#### 5 DISCUSSION

#### 5.1 Background

At its ordinary meeting held on 8 November 2022, Council resolved:

"That a further report on patronage numbers of the Ferry Service be brought back to Council in October 2023." (refer G22.1108.15 in part)

#### 5.2 Patronage data

The Service has grown in popularity since its introduction in December 2019 with 220,000 people using the service since inception. Figure 1 outlines monthly patronage of the Service over the last three financial years. It shows April is the most popular month with 2022-23 patronage higher than 2021-22 and 2020-21.

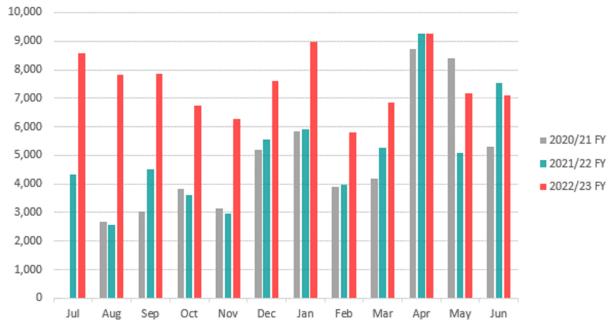


FIGURE 1: Monthly patronage data comparison by financial year

Monthly and daily patronage of the Service for 2022-23 is outlined in Figure 2. More than 90,000 people used the Service in 2022-23 which is a 49 per cent increase from 2021-22.



FIGURE 2: Monthly total and average daily patronage data – 2022-23 financial year

#### 5.3 Marketing

The Service provider is predominantly responsible for marketing the Service however the City also assists with promotion. At present, the City is currently undertaking a promotional campaign of its community passenger transport initiatives, including the Service, to increase awareness and patronage.

Figure 3 outlines the City's social media posts promoting the Service as part of this campaign.

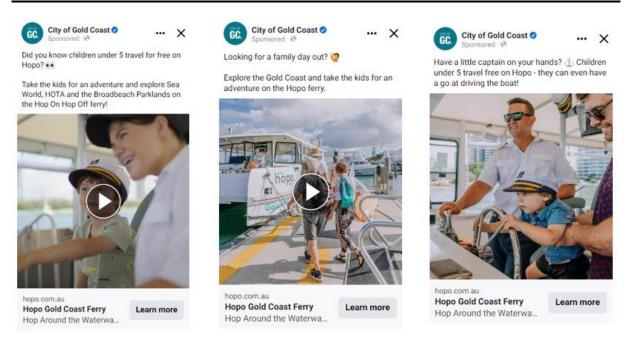


FIGURE 3: Examples of Hopo social media posts from the Passenger Transport Campaign

# 6 ALIGNMENT TO THE COUNCIL PLAN, CITY STRATEGIES AND OPERATIONAL PLAN

The Service aligns with the following City strategies and plans:

*The Council Plan 2022-2027*: supports the implementation of the City vision. It describes the outcomes we are working towards and our measure of success. This report aligns through the following core themes:

#### DIVERSE THRIVING ECONOMY

- We have sustainable economic growth in the industries and sectors that offer opportunity.
- We are the best place to visit in Australia.

#### **CONNECTED COMMUNITY**

• We have beaches, parklands, waterways and natural places that are accessible and enjoyed by everyone.

The City Operational Plan 2023-24: explains what programs and services the city delivers and how they support the implementation of the City vision, Council Plan 2022-2027 (Council Plan) and City strategies. This report aligns to the City Operational Plan, Program 5 for Economic Development through the following actions:

- <u>Tourism Management and Marketing</u>: Promote the Gold Coast as a world class visitor destination for domestic and international travellers by working with partners to grow visitor numbers for a resilient visitor economy.
- <u>Economic Development:</u> Drive economic growth through the development and delivery of economic infrastructure by delivering partnerships that help grow and develop a resilient economy.

Gold Coast City Transport Strategy 2031: guides the City's transport system to 2031, creating a smart, connected and liveable city under a one network approach. The ferry service delivers action 11.1 of this strategy; *"Reassess the viability of providing commuter ferry services for the Broadwater and Nerang River"*.

Gold Coast Public Transport Plan 2018-2028: recognises the important role that public transport has in shaping the City's future transport network and identifies actions to increase

public transport use. The ferry service delivers action 2.5 of this modal plan, "Support the State and Gold Coast Waterways Authority to investigate water shuttle services between key destinations along the City's waterways".

#### 7 FUNDING AND RESOURCING REQUIREMENTS

#### Budget/Funding Considerations

The Service is managed by an existing Council officer within the Transport Policy and Partnerships Team (Transport and Traffic Branch).

#### 8 RISK MANAGEMENT

This report is for noting purposes only. Existing risks have been identified and mitigated as part of the ongoing general contract management.

#### 9 STATUTORY MATTERS

Not applicable.

#### 10 COUNCIL POLICIES

Not applicable.

#### 11 DELEGATIONS

Not applicable.

#### 12 COORDINATION & CONSULTATION

Name and/or Title of the stakeholder consulted	Directorate or organisation	Is the stakeholder satisfied with the report and recommendations (Yes/No) (comment as appropriate)		
Cath Drinkwater, Director	Transport & Infrastructure	Yes		
Alyson O'Rourke, Acting Manager	Transport & Traffic	Yes		

#### 13 STAKEHOLDER IMPACTS

Not applicable.

#### 14 BRISBANE 2032 OLYMPIC AND PARALYMPIC GAMES IMPACT

Not applicable.

#### 15 TIMING

The current contract for the Service is due to end in August 2027 with an option to extend for a further five years.

#### 16 CONCLUSION

The City sponsored Ferry Service has continued to grow in popularity since its introduction in December 2019. Approximately 90,000 trips were taken on the Service last financial year, which is a 49 per cent increase when compared to the 2021-22 financial year. The City and the Service provider will continue to work in partnership to promote further and increase uptake of the service.

#### 17 **RECOMMENDATION**

It is recommended that Council resolves as follows:

That Council notes the report on the patronage of the Ferry service.

Transport and Infrastructure Committee Meeting #836 (10 October 2023)

#### Ferry Service Patronage Update

#### **ATTACHMENT 1**

#### Previous Council Resolutions Relating to the City's Ferry Service

Timing	Title / Subject	Resolution No.	Content
November 2022	Ferry Service -	G22.1108.15	1. That Council notes:
	Geographical Expansion		a. the Ferry expansion update report.
			b. the findings of the Commuter Ferry Trial undertaken in November 2021, which demonstrated that there is limited commuter demand for a ferry service at present with it primarily being used for tourist and recreational purposes.
			<li>c. expansion of the service to the South and West is not feasible at this time;</li>
			d. expansion of the service to the North is technically feasible however currently not likely to result in high patronage given the limited commuter benefit and relatively small tourist population in this area of the City.
			<ol> <li>That a further report on patronage numbers of the Ferry Service be brought back to Council in October 2023.</li> </ol>
March 2022	Ferry Service - Transition from Trial to Ongoing Service	G22.0315.026 (in part)	<ol> <li>That the Significant Contracting Plan for the Gold Coast Ferry Service (Attachment 2) be adopted and Council's Contracting Plan amended accordingly.</li> </ol>
			<ol> <li>That the CEO be delegated the power to enter into negotiations and if those negotiations are successful to the CEO's satisfaction, enter into a contract pursuant to the Significant Contracting Plan in Attachment 2.</li> </ol>
			4. That Council authorise the Director of Transport & Infrastructure to work in partnership with the current Contractor to investigate the merits of expanding the service area and report back to Council in December 2022 with the findings.
			<ol> <li>That any extension option be brought to Council for consideration prior to the expiration of the initial five year contract.</li> </ol>
November 2021	Ferry Trial - Update	G21.1101.011 (in part)	<ol> <li>That Council notes the content of the Gold Coast Ferry Trial Report.</li> </ol>
			<ol> <li>That Council notes a further report will be brought back to the Transport and Infrastructure Committee in early 2022 in relation to possible future contract negotiations for Council's endorsement.</li> </ol>
			4. That any possible future contract negotiations have regard to:
			a. better integration of the service within the Translink network
			<ul> <li>b. promotion of third party customer feedback opportunities</li> <li>c. network expansion to the north, south and west.</li> </ul>
August 2019	Ferry Trial - Tender Evaluation	G19.0827.006 (in part)	<ol> <li>That Council notes the current status of tender negotiations with Ferry I Pty Ltd to deliver the Gold Coast ferry trial.</li> </ol>
			<ol> <li>That Council pursuant to section 257 of the Local Government Act 2009, the Chief Executive Officer be delegated the power to finalise negotiations and enter into a subsequent contract with Ferry I Pty Ltd for LG413/411/19/082 Gold Coast Ferry Trial Services Agreement.</li> </ol>
			4. That Council notes that the contract term is for an initial period of two years with the ability for the Council, at its sole discretion, to offer the operator a five-year plus five-year extension of term subject to demonstrated satisfactory service performance.
May 2019	Ferry Service Trial - Expression of Interest Evaluation	G19.0528.005 (in part)	<ol> <li>That based upon the results of the EOI evaluation, Council approve a select tender process be progressed with SW Cruise Co Pty Ltd to deliver the proposed Gold Coast Ferry Service Trial.</li> </ol>
			<ol> <li>That Council gives in principle approval to the following project funding allocations noting that final approval will need to occur</li> </ol>

Timing	Title / Subject	Resolution No.	Content
			through FY 2019-20 budget deliberations;
			a. new capital funding of \$1,000,000 in FY 2019-20 to deliver the necessary disability access and infrastructure improvements to enhance the customer experience at the stops identified within the approved ferry trial proposal.
			b. new operational funding of \$500,000 in FY 2019-20 and \$500,000 in FY 2020-21 to undertake the necessary management activities, community consultation, user group engagement activities, ferry wash trials and ferry trial evaluations.
			<ol> <li>That Council notes that a further report will be brought back for consideration following completion to the select tender process.</li> </ol>
February 2019	Ferry Service Trial – Expression of Interest Process	G19.0226.027	<ol> <li>That Council approve the release of an EOI to market for the ferry service trial to gauge market interest and allow proposals to be received from suitable ferry service operators subject to the following conditions:</li> </ol>
			a. the trial period is proposed for two years.
			b. the City's preferred minimum service network is for a five stop ferry service between Southport, Sea World, Marina Mirage, Appel Park (Surfers Paradise) and HOTA. Opportunity will exist for proponents to submit alternative proposals that may consider a more extensive network.
			c. ferry services will need to operate within existing waterway speed limits. However, opportunities can be explored with proponents during the trial period for speeds to be increased along sections of the ferry route if desired.
			<ul> <li>no subsidy will be provided by the City to support service operations.</li> </ul>
			<ol> <li>That a report be brought back to Council on completion of the EOI process to assess and determine whether approval is given to:</li> </ol>
			a procuring a ferry trial proposal through a preferred tender arrangement.
			b allocating new capital funding of \$1,000,000 in FY 2019-20 to deliver the necessary disability access and infrastructure improvements to enhance the customer experience at the stops identified within the approved ferry trial proposal.
			c allocating new operational funding of \$700,000 in FY 2019- 20 and \$700,000 in FY 2020-21 to undertake the necessary community consultation, user group engagement activities, ferry wash trials and ferry trial evaluations.
			An evaluation framework to determine the success of the proposed ferry trial will be included as part of this report.
			<ol> <li>That Council endorse the development of Memoranda of Understanding (MOU's) with Gold Coast Waterways Authority, Village Roadshow and Marina Mirage to ensure ferry stop availability and financial responsibilities are defined for the trial.</li> </ol>
December 2018	Ferry Service – Planning Update	G18.1207.030	<ol> <li>That Council note the progress of current planning works being undertaken for the operation of a proposed ferry service trial on the Broadwater and Nerang River.</li> </ol>
			<ol> <li>That Council further note that a ferry service trial options analysis report will be presented back to Council in March 2019 the purpose of which will be to seek approval of a preferred ferry service trial option to progress to procurement.</li> </ol>
			<ol> <li>That \$300,000 be allocated to the Ferries Trial Project and associated investigations as part of the December budget review.</li> </ol>
October 2018	Ferry Service – Transport and Infrastructure Committee Request	G18.1030.009	That the Director bring forward a report regarding the introduction of ferry services in the City including the number and location of terminals, supporting facilities, connections to other public transport systems and services, financial viability and costs of operation, approval processes, operational issues, tendering and the implementation of a trial of services.

#### 6.6 SUPPLY CHAIN DISRUPTION RISK ASSESSMENT

Objective ID:	A92923612
File Number:	01/LG115/1358/01/2021/CF
Author:	Richard Ellis, Executive Coordinator Risk and Compliance, Risk Integrity and Assurance
Authoriser:	Cath Drinkwater, Director Transport and Infrastructure, Transport and Infrastructure
Attachments:	1. Supply Chain Disruption Risk Assessment - TI Committee

#### 1 BASIS FOR CONFIDENTIALITY

Not applicable.

#### 2 EXECUTIVE SUMMARY

Not applicable.

#### 3 PURPOSE OF REPORT

The purpose of this report and presentation is to inform the Transport and Infrastructure (TI) Committee of the supply chain disruption risk facing the City and to detail the relevant controls required to reduce the risk.

#### 4 PREVIOUS RESOLUTIONS

Council previously resolved for key risks to the City be reported to Council for oversight and assurance (G23.0615.060).

#### 5 DISCUSSION

On 15 June 2023 Council endorsed Top Risk Focus Areas to be reported to relevant Council committees to ensure Council has awareness and oversight of key risks and how these are being managed and mitigated with the intent to mitigate the risk to ALARP (as low as reasonably practicable).

The City of Gold Coast (the City) has a reliance on the free movement of goods and supplies from providers in order to provide critical services to the community such as infrastructure delivery and maintenance. Whilst there are numerous external factors that can impact the supply chain, the City can implement measures to minimise disruption.

The City faces a substantial risk in the form of supply chain disruption, a concern that was amplified by the COVID-19 pandemic. Although the global supply chain is gradually recovering from the widespread disruption, this risk persists and is shaped by factors such as cost of goods and materials, geopolitics, economics, labour shortages and the environment. The specific potential consequences of supply chain disruption for the City include service interruptions, delays, labour shortages, budget impacts and damage to the City's reputation in the deliverability of capital projects.

A detailed risk assessment, outlined in the attached presentation, has been conducted and considers existing controls to manage the risk. The risk has been evaluated with the current controls the City has in place, as 'Medium' Risk with a 'Moderate' impact and 'Likely' likelihood.

The City has already taken steps to enhance collaboration with suppliers and contractors to navigate market challenges and improve planning including consideration of the lead time for some materials known to be in short supply. Further mitigation strategies have been identified to curtail the risk of disruption and to build future resilience in critical service delivery. These encompass increasing the maturity of contract management, refining project

and program planning and governance, increasing confidence in deliverability of major capital projects and reinforcing operational resilience.

Attachment 1 to this report outlines the risk assessment completed and relevant measures the City is taking to reduce/mitigate the identified impacts.

# 6 ALIGNMENT TO THE COUNCIL PLAN, CITY STRATEGIES AND OPERATIONAL PLAN

Our Council Plan supports the implementation of the City Vision. It describes the outcomes we are working towards and our measure of success. This report aligns to the Council Plan 2022-2027 through the following core themes:

#### ONE CITY

We are a high performing, customer focused organisation which delivers value for money.

#### 7 FUNDING AND RESOURCING REQUIREMENTS

#### **Budget/Funding Considerations**

Additional identified risk mitigations are either funded through the current financial year budget or will be integrated into the implementation of City signature projects such as the 1CP operating model workstream or the Security of Critical Infrastructure project.

#### **Costs for Capital Works and Service Proposals**

Not applicable.

#### People and Culture

Not applicable.

#### 8 RISK MANAGEMENT

Supply chain disruption represents one of the City's Top Risk Focus Areas and has been prioritised for assessment and risk mitigation.

#### 9 STATUTORY MATTERS

Not applicable.

#### 10 COUNCIL POLICIES

Not applicable.

#### 11 DELEGATIONS

Not applicable.

#### 12 COORDINATION & CONSULTATION

Name and/or Title of the stakeholder consulted	Directorate or organisation	Is the stakeholder satisfied with the report and recommendations (Yes/No) (comment as appropriate)
Cath Drinkwater, Director Transport & Infrastructure	Transport & Infrastructure	Yes

Luke Connery, Chief Risk & Compliance Officer	City Operations	Yes
Zara Meha, Manager Risk, Integrity and Assurance	City Operations	Yes
Jodie Hely, Chief Procurement Officer	City Operations	Yes
Craig Perkins, EC Network Operations	Water & Waste	Yes – consultation on risk assessment and current and future controls
Subject matter experts:		
Michael Kenyon, Manager Fleet	City Operations	Yes – consultation on risk assessment and current and future controls
Mitch Bradow, Manager Infrastructure Delivery	Transport & Infrastructure	Yes – consultation on risk assessment and current and future controls
Christian Truscott, Manager Asset Solutions	Water and Waste	Yes – consultation on risk assessment and current and future controls
Matthew Walker, Executive Coordinator Technology & Cyber Security	City Digital and Data	Yes – consultation on risk assessment and current and future controls

#### 13 STAKEHOLDER IMPACTS

Not applicable.

#### 14 BRISBANE 2032 OLYMPIC AND PARALYMPIC GAMES IMPACT

It is anticipated that successful implementation of the additional risk mitigation measures will reduce impacts to the delivery of the Brisbane 2032 Olympic and Paralympic Games.

#### 15 TIMING

Deadlines for the implementation of additional risk mitigations is contained within the detailed risk assessment in attachment 1. Noting that supply chain disruption is one of the City's Top Risk Focus Areas there will also be consistent monitoring of the risk.

#### 16 CONCLUSION

As identified within the detailed risk assessment in attachment 1, supply chain disruption represents a high inherent risk to the organisation providing for a tangible impact on the ability to deliver critical services and infrastructure, as well as increasing City project delivery costs and timelines.

The implementation of additional risk mitigations across the functions of procurement, business continuity, critical infrastructure and infrastructure planning governance have been determined to reduce the residual risk levels and enhance organisational resilience into the future.

#### 17 RECOMMENDATION

It is recommended that Council resolves as follows:

That the content of this report and corresponding risk assessment are noted.

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# Supply Chain Disruption Risk Assessment

Top City Risk Focus Area Assessment – Last Update: Sept 2023

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# **Supply Chain Disruption Risk Assessment**

Risk: Supply chain disruption may impact the ability to deliver critical services and infrastructure, as well as increase City project delivery costs and timelines.

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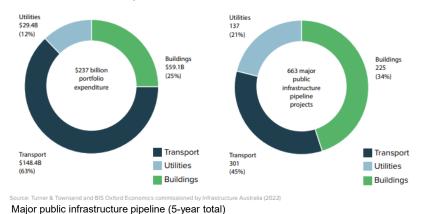
#### Market Insights and Trends Impacting Our Supply Chain

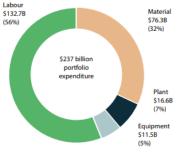
	Events	Trends	Insights	Impact			
ical	Russia – Ukraine war	=	Stressed particularly on Europe and raw material supply chain	- Possible economic shocks			
political	Tension with China	=	China is Australia's largest trading partner	<ul> <li>Contractors are less willing to take on risk and favour risk sharing arrangements to address risks such as hyperinflation and supply chain constraints</li> </ul>			
Geo	US Swing state	NEW	US is Australia's largest foreign investor				
	Covid-19 impact	Ŷ	Global supply chains continue to normalise but with price pressure due to inflation	Further normalisation of delivery times (excluding further disruptions)			
	High commodity prices	≁	<ul> <li>Commodity prices have decreased but still nearly 60 % above pre-COVID levels</li> <li>Driven by strong global economic activity, supply chain issues, war in Ukraine and limited new supply coming online</li> </ul>	Key inputs to construction are expected to come off but still elevated compared to pre-Covid prices			
	High energy prices	=	Thermal coal prices started to normalise     Crude oil has started to fall but remain elevated     LNG prices eased, <u>still remain</u> elevated above pre-Covid levels	Energy prices (key inputs to construction) have spiked and are expected to remain elevated due to supply constraints. Energy price volatility causes higher inflation.			
chain disruption	Global recession and inflation	=	<ul> <li>Inflation has peaked across major global economies (US peaked at 9.1% in June22 and fell to 4.9% in Apr 23)</li> <li>Australia inflation peaked at 7.8% in Dec22 and remained high at 7% in Mar23.</li> </ul>	Price pressure in the global market supply remains elevated.			
ply chain dis	Tight labour market	-	Australian unemployment rate and capacity utilisation indicating overheated economy. At July 2023 unemployment rate was at 3.6%. Stretched market with capacity issues and labour/skills shortages. A pick- up in migration is expected to help alleviate skill shortages.	<ul> <li>Construction industry is amongst the top six industries having difficulty finding staff.</li> <li>Employees bargain for higher wages in light of rising inflation and skill shortages. This is likely to continue in the medium term and will be reflected in the cost of construction.</li> </ul>			
Supply	Natural disaster	=	Increasing intensity and frequency of natural disaster (i.e. bushfire, flood, cyclone & etc.)	- Supply disruption - Material shortages - Diversion of resources			
	Australia economy recession	=	Australian economy will continue to slow as cash rate increases and cost of living pressures take a toll on businesses and households	<ul> <li>Significant amount of work remains in the pipeline in the construction industry (residential &amp; non-residential). Contractors likely to remain in short supply.</li> <li>Possible reduction in demand and deferral of some projects.</li> </ul>			
	Increasing rate of inflation	-	<ul> <li>Inflation peaked but remain at high levels. RBA/Commonwealth Treasury expect a return to the RBA's inflation target band of 2-3% by Jun25</li> <li>Construction-related insolvencies increased by 82% compared to previous financial year, with 1,709 construction companies going insolvent</li> </ul>	<ul> <li>Cost pressures are expected to persist for the short term as inflation continues. 'Tipping point' scenario yet to materialise.</li> <li>Higher costs for construction work, potential cost blow-outs for infrastructure projects in the pipeline.</li> <li>Increased insolvencies within construction industry leading to risk of delays.</li> </ul>			
eensland market condition	High infrastructure pipeline for QLD and SEQ/Gold Coast	↑	<ul> <li>Capacity constraints are paired with large pipeline of infrastructure projects</li> <li>The national infrastructure pipeline is forecast to be at its highest level since the mining boom. Main driver being government transport &amp; resource projects e.g. Ipswich Motorway, Bruce Highway, M1 upgrades, Coomera Connector, GCLR in Qld, Coffs Harbour Bypass, NorthConnex, WestConnex Pacific and Princess Highway upgrades, The Northern Road project, Western Harbour Tunnel &amp; Beaches Link in NSW, North East Link, West Gate Tunnel, Level Crossing Removal program and Monash Freeway in Vic, T2T Project in Adelaide, NorthLink WA</li> <li>The market is arguably at capacity, so project slippage is now expected</li> </ul>	<ul> <li>Competition in the construction industry is high. Forecast to peak over 2024/2025.</li> <li>Contractors are increasingly selective when choosing which projects to bid on due to robust infrastructure pipeline and prefer larger scale, more programmatic approaches, risk sharing arrangements, using interactive tendering approaches.</li> <li>Pressure in labour and materials supply in step with demand creates unprecedented uncertainty on project outcomes and opportunities to adapt and pivot in delivery required.</li> </ul>			
ralia/Que	Population growth due to interstate	=	<ul> <li>QLD net overseas migration has increased and population growth picked up to 2.1 % in FY 2021-22 which is fastest of the states and territories</li> </ul>	There will be increased demand for infrastructure as the population continues to increase			

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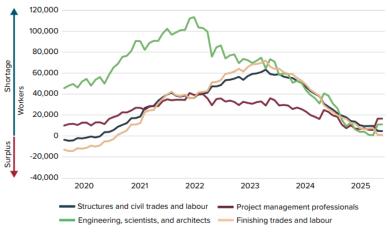
Transport projects account for 63% of five-year major public infrastructure spend estimated at \$237 billion.





Plant Labour Equipment Material

There remains increased demand for all non-labour inputs. Opportunities exist to leverage local circular economy and increase uptake of recycled materials in infrastructure.



The Australian infrastructure sector is facing an unprecedented workforce shortage. A sufficiently skilled and available workforce is critical for realising Australia's ambitious public infrastructure

skilled and available workforce is critical for realising Australia's ambitious public infrastructure investment. However, the rapid expansion of public infrastructure means demand is substantially exceeding existing supply.

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Ri	sk description		Curre	nt aggregate risk le	evel	ро			
	upply chain disruption may impact the ability to deliver cr s well as increase City project delivery costs and timelines	a disruption may impact the ability to deliver critical services and infrastructure, crease City project delivery costs and timelines.				Likelihood			
			Risk owner Director Transport a Cath Drinkwater	& Infrastructure				()	
	Causes	Current	control overview		Current cause risk level				
	<ul> <li>Delay in material supply may impact the City and contractor's ability to deliver critical services and infrastructure as well as increase City project delivery costs and timelines.</li> <li>Supply vs demand including the impacts of a competitive market, price pressure and competing state and interstate infrastructure projects and labour shortages. This may impact the ability to deliver critical services and infrastructure as well as increase City project delivery costs and timelines.</li> </ul>	<ol> <li>Controls in place are effective with Current controls in place include: <u>Program/portfolio management</u></li> <li>Review current budget and pl longer supply lead time and cc</li> <li>Review the portfolio and capi on supply chain conditions.</li> <li>Manage inventory levels with potential disruption and stock</li> <li>Deliverability assessment on <u>contract lifecycle management</u></li> <li>Perform continuous market a</li> </ol>	anning processes with co ost fluctuations. tal works program and re consideration of longer l piling critical items. portfolio.	nsideration for -prioritise based ead times,					
	<b>Non-competitive procurement approaches</b> to leverage market intelligence and inform service planning, category planning, sourcing strategy and contract model.	<ul> <li>and risks and structure sourci accordingly.</li> <li>Category analysis and market accordingly. This may include agreements, long term collab market and maximise market</li> <li>Continued reassessment of su and the City.</li> <li>Open book approach to contr appropriate.</li> <li>Supply management for critical series.</li> <li>Identify potential options for continuity of critical services.</li> <li>Build support for a local circul by to reduce external supply</li> </ul>	assessment to structure programs, packaging opp orative frameworks, to ar response. iitable risk allocation betw act claims, variations, nep vices alternative delivery to en ar economy and embed of	procurements oortunities, panel dapt to current ween contractors gotiations where sure service	Medium		(Se	fi Inh Agg	Impa ry, reputatior inancial impa erent risk level gregate risk level get risk level

## кізк імітіgations

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#### To further mitigate the risk, the following programs will be undertaken:

	Program/activity	Mitigations	Action owner	Timeframe/due date
1	Contract management maturity uplift	Increase contract management maturity across the organisation. This includes risk categorisation, governance framework and processes, competency and capability, document management, tools and templates.	Jodie Hely Chief Procurement Officer	Jul - 24
2	Increase market intelligence and proactive identification of potential supply risks	Currently in-depth market assessment is approximately biannually by CPO dependent on budget availability and project requirements. In depth industry specific market assessment is undertaken as and when required dependent on specific supply requirements.	Jodie Hely Chief Procurement Officer	Jul – 24
		The future procurement operating model will take an increased and proactive approach to broad market intelligence, trend analytics, strategic spend analysis, and identification of potential supply risks to inform strategy through all phases of the contract lifecycle.		
3	Supply management for critical services as part of business continuity management	<ul> <li>Identify critical services within the City.</li> <li>Identify products and supplies of the critical services and ensuring contingency plans are in place in the event of disruption.</li> </ul>	Luke Connery Chief Risk and Compliance Officer	Program to commence January 2024 with a proposed completion date of June 2024.
4	Security of Critical Infrastructure (Water & Waste operations) - Critical spare list/plan and inventory management	<ul> <li>Identify critical components and plants related to critical infrastructure in Water &amp; Waste operations.</li> <li>Improve inventory management and planning for critical components related to water and waste operations.</li> <li>*Similar control is raised under the Critical Infrastructure Risk Management Program (CIRMP) in Water &amp; Waste and 'City Top Risk Area 2023/24' on critical infrastructure.</li> </ul>	Craig Perkins Executive Coordinator Network Operations	Improvement actions for security of Critical Infrastructure will be carried out in FY 2023/24
5	Uplift planning maturity in Transport & Infrastructure	Increase project planning maturity for capital works in Transport & Infrastructure. This includes extending future planning for a 10 years horizon, programs packaging opportunities and long-term collaborative approach in order to adapt to current market and maximize market response.	Mitchell Bradow Manager Infrastructure Delivery	Further clarity on future state improvements required prior to proceeding.
6	Review the deliverability of major capital projects	Review the capital portfolio in line with Corporate Planning & Performance achievability guidelines to assess project deliverability.	Cath Drinkwater Director Transport & Infrastructure	Jan - 24
7	Project and program planning and governance	Refine project and program planning and governance for capital projects through the new Enterprise Program Office to ensure a consistent approach to the effective allocation of resources, risk management and ensuring efficiency and effectiveness in program execution.	GM, Strategy, Performance & Transformation (role currently under recruitment)	Dec - 24

\*Risk Ownership and controls to be handed over to new owners as part of the business readiness activities for Nov 1 future state

### 7 CLOSED SESSION REPORTS AND PRESENTATIONS

#### 7.1 MINOR LAND ACQUISITION FOR INTERSECTION UPGRADE CURRUMBIN VALLEY A90892941 RD112321/46/18

#### **BASIS FOR CONFIDENTIALITY**

That this report be considered in Closed Session pursuant to section 254J (3) of the *Local Government Regulation 2012* for the reason that the matter involves:

- (c) the local government's budget;
- (h) negotiations relating to the taking of land by the local government under the *Acquisition of Land Act 1967*;

#### OVERVIEW

To obtain Council's approval to acquire land for road purposes in Currumbin Valley to construct a roundabout at the adjacent road intersection.

## 8 GENERAL BUSINESS