

DETAILED OFFICER REPORT APPLICATION FOR DEVELOPMENT APPROVAL

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SUMMARY SHEET				
Applicant:	Stockland (Development) Pty Ltd			
Owner:	Stockland (Development) Pty Ltd			
Consultant:	RPS Australia East Pty Ltd			
Proposal:	 Preliminary Approval for Material Change of Use of Premises (including a Variation Request to vary the effect of the Sunshine Coast Planning Scheme 2014) for Residential, Business, Community, and Sport & Recreation uses Development Permit to Reconfigure a Lot (4 Lots into 182 Lots, new roads, parks and balance lot, over 2 Stages) 			
Properly Made Date:	19 December 2018			
Information Request Date:	31 January 2019			
Information Response Received Date:	17 May 2019			
Further Advice Date:	22 August 2019			
Further Advice Response Received Date	2 October 2019 (All except Hydrology information			
	14 October 2019 (Hydrology information)			
Decision Due Date: Number of Properly Made Submissions:	1 July 2020 417 submissions were received, with 132 in support and 285 opposed to the development. Of these submissions, 388 submissions were properly made			
PROPERTY DETAILS				
Division:	8			
Property Address:	De Vere Road, PACIFIC PARADISE 232 - 284 Godfreys Road, PACIFIC PARADISE Settlers Park Ocean Drive, PACIFIC PARADISE 23 Stillwater Drive, PACIFIC PARADISE 581-593 David Low Way, PACIFIC PARADISE			
RP Description:	Lot 1 & 2 RP 103117, Lot 4 - 8 RP 98356, Lot 2 & 3 RP 842858, Lot 1 RP 811523, Lot 8 RP 812125, Lot 261 SP 124274, Lot 10 SP 248472, Lot 3 SP 248471 & part			

	of Godfreys Road (unformed road separating Lot 2 RP103117 from Lot 3 on SP248471)			
Land Area:	Total - 104.7 ha (1,047,615 m ²)			
Existing Use of Land:	Vacant			
STATUTORY DETAILS				
Planning Scheme:	Sunshine Coast Planning Scheme 2014 (10 December 2018)			
SEQRP Designation:	Urban Footprint			
Strategic Framework Land Use Category:	Urban			
Local Plan Area:	Maroochy North Shore Local Plan			
Zone:	Emerging Community Community Facilities – Place of Worship (6 De Vere Road) Open Space (Settlers Park) Low Density Residential (23 Stillwater Drive)			
Assessment Type:	Variation Request (Material Change of Use) Impact Assessable (Reconfiguring a lot)			

PROPOSAL:

The application seeks approval for:

- Preliminary Approval for Material Change of Use of Premises (including a Variation Request to vary the effect of the Sunshine Coast Planning Scheme 2014) for Residential, Business, Community, and Sport & Recreation uses
- Development Permit to Reconfigure a Lot (4 Lots into 182 Lots, new roads, park and balance lot, over 2 Stages)

Each aspect is explored in more detail below.

Preliminary Approval for Material Change of Use of Premises (including a Variation Request to vary the effect of the Sunshine Coast Planning Scheme 2014) for Residential, Business, Community, and Sport & Recreation uses

The applicant proposes a Preliminary Approval, including a Variation Request to vary the effect of the planning scheme seeks to secure approval for the development concept for the Twin Waters West Estate and guide the future assessment and levels of assessment of subsequent applications for development permits lodged over the site.

The Preliminary Approval includes the following components:

- Establish a zone plan, including the following zones
 - o Low Density Residential zone
 - o Medium Density Residential zone
 - o Community Facilities zone
 - o Open Space zone

- Vary the permitted residential densities, overriding Acceptable Outcome AO22 of the *Maroochy North Shore local plan code*;
- Vary the categories of assessment for future development applications within these zones, overriding the Table of Assessment for the current Emerging Community and Community Facilities zoning under the Sunshine Coast Planning Scheme 2014;
- Vary the permitted building heights for the Medium Density Residential zone and the Community Facility zone to permit development up to 12m, overriding the Height of Buildings and Structures Overlay Map OVM21H under the Sunshine Coast Planning Scheme 2014; and
- Vary a number of design provisions for dwelling houses.

The Master Plan is supported by the following plans:

- Zone Plan;
- Development Density Plan;
- Maximum Building Heights Plan;
- Open Space Plan;
- Pedestrian & Cycle Movement Plan;
- Road Network:
- Sections Road Typologies;
- Edge Treatment Plan; and
- Sections Walkable Waterfront.

In the event of approval, the applicant seeks the overall development outcome for the site to include:

- 584 residential lots:
- 2 multiple dwelling units sites (with an expected density of 180 dwellings over the two sites);
- A community facilities site with some limited commercial uses, such as office, food and drink outlet, shop, health care services, child care centre and place of worship; and
- 26.68 ha of open space.

<u>Development Permit to Reconfigure a Lot (4 Lots into 182 Lots, new road, park and balance lot)</u>

The application seeks a development approval to reconfigure the lots for the first two stages to deliver 182 lots including 169 residential lots, one Community facility lot for the purposes of a future Community Hub, roads and 11 open space lots.

The balance of the development site (southern precincts) will remain as management lots, with future development subject to further development applications.

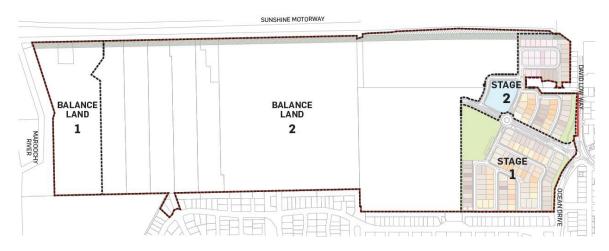


Figure 1 - Overall Reconfiguration of a lot plan



Figure 2 - Reconfiguration of a lot plan



Figure 3 - Reconfiguration of a lot plan

SITE DETAILS:

Site Features and Location

SITE AND LOCALITY DESCRIPTION				
Land Area:	Total - 104.7 ha (1,047,615 m ²)			
	Lot 1 RP 103117 – 6,556 m ²			
	Lot 2 RP 103117 – 260,300 m ²			
	Lot 4 RP 98356 – 45,179 m ²			
	Lot 5 RP 98356 – 45,210 m ²			
	Lot 6 RP 98356 – 44,458 m ²			
	Lot 7 RP 98356 – 45,420 m ²			
	Lot 8 RP 98356 – 37,280 m ²			
	Lot 2 RP 842858 – 4,000 m ²			
	Lot 3 RP 842858 – 94,290 m ²			
	Lot 1 RP 811523 – 315,200 m ²			
	Lot 8 RP 812125 – 2,563 m ²			
	Lot 261 SP 124274 – 3,299 m ²			
	Lot 10 SP 248472 – 9,781 m ²			
	Lot 3 SP 248471 – 130,300 m ²			
	Part of Godfreys Road (unformed road separating Lot 2 RP103117 from Lot 3 on SP248471) – approx. 3,689 m ²			

Existing Use of Land:	Vacant
Road Frontage:	The site has direct frontage to Godfreys Road to the west (Sunshine Motorway is just beyond Godfreys Road to the west), Stillwater Drive in the southern end of the site connecting to Twin Waters and David Low Way to the north.
Significant Site Features:	The site has a large stand of trees in the eastern part of the site. The site is also characterised by Settler's Park and the
	mango trees, and the blaze tree on the western boundary. These are all listed in the Heritage and Character Areas overlay code.
Topography:	The site is relatively flat.
Surrounding Land Uses:	The site is bound by residential to the east and north, Sunshine Motorway to the west and rural lots to the south of the site.

The location of the subject site in relation to its surrounds is shown below:



Figure 4 - Location Plan

An aerial photo of the site is shown in the image below.



Figure 5 - Aerial Plan

Development History of Site

MCU07/0130

At the Ordinary Meeting held on 16 July 2009, Council refused an application for preliminary approval to override the planning scheme for approximately 950 residential lots ranging in area from 200m² to 640m² (average of 400m²) at the 103 ha site located north of the Maroochy River and east of the Sunshine Motorway at Twin Waters (Lot 1 RP811523, Lot 3 SP166012, Lots 1-2 RP103117, Lots 4-8 RP98356, Lot 3 RP842858 & Lot 261 SP124274). In this application, it was proposed that 43.7 ha would be retained for conservation purposes. This included the vegetation on site, buffers to the motorway and flood management areas.

The reasons for refusal were as follows:

1. The proposed development is for an urban activity located on rural land outside an urban precinct. The site is identified as "Good Quality Agricultural Land" and the

- proposal seeks to convert the land to urban use. Consequently, the proposal conflicts with the provisions of Maroochy Plan 2000:
- 2. The proposed development is located on part of the Maroochy River floodplain and has not adequately demonstrated that development of the site would achieve the outcomes of the Maroochy Plan for the protection of persons and property from flood risk, or preserve the required flood storage and conveyance functions of the site. Consequently the proposal conflicts with the provisions of the Maroochy Plan;
- 3. The proposal is premature insofar as Council has not undertaken necessary forward planning (including planning scheme amendments) in accordance with the South East Queensland Regional Plan. Furthermore, the proposal requires out of sequence infrastructure upgrades, which have not been considered by Council in terms of its impact on Planning Scheme Policies for funding trunk infrastructure within the Shire. Consequently, the proposal conflicts with the provisions of Maroochy Plan 2000; and
- 4. Insufficient information has been provided to demonstrate that the proposal complies with the applicable Codes including the Code for Integrated Water Management, Code for Waterways and Wetlands and the Code for Nature Conservation.

The plan considered by Council at this time is below.



Figure 6 - Proposal Plan previously considered by Council (MCU07/0130)

An appeal was filed with the Planning and Environment Court on 18 August 2009 and the appeal was dismissed on 13 December 2013.

Some of the key findings from the Judgement from His Honour associated with the Appeal are provided below:

"The proposal has a deal of attraction. It would:

- put a disused site to a productive and economic use;
- provide residential development in a growth area;
- is likely to be marketed at the affordable end of the market;
- is conveniently located proximate to the Maroochydore PRAC, the airport and significant infrastructure;
- expand residential development onto a site which is adjacent to existing residential development....and separated from other rural land....;
- utilise a site which can be physically developed for the use without undue external impacts(leaving visual impact to one side);
- incorporate mitigation measures to address the site's flood prone status;
- incorporate screening to address the visual impact of development;
- provide benefits as discussed earlier.

On the other hand, the development would consume GQAL, erode to some extent, the open rural landscape character of this area and place a substantial new residential community into a floodplain, with the attendant risk of a substantial number of persons becoming isolated in times of major natural disaster.

The balancing exercise cannot be carried out without regard for the Planning Scheme and the nature and extent of the conflict between it and the proposal. <u>In this case the conflict, discussed earlier, is both clear and substantial.</u>

For the reasons discussed earlier, the SEQRP's inclusion of the site within the urban footprint does not determine that the land ought be used for urban development or that it ought be given over to such development at this time. It is a relevant matter, but does not overtake the planning strategy of excluding use of site from urban development at this time under the current Planning Scheme or the Draft Planning Scheme.

The planning strategy of the Council, under both the current and existing schemes, to retain this site as rural land at this time, is clear. It might be thought to be conservative, but it is understandable, in the context of land of some agricultural quality in this open rural floodplain in circumstances where sufficient residential development opportunities can be and are provided elsewhere at this point. The strategy deserves appropriate respect.

As was submitted on behalf of the appellant, conflict, even significant conflict is not necessarily fatal. There is the opportunity to obtain a preliminary approval overriding the Planning Scheme where sufficient grounds are demonstrated. In this case it is, I consider, important not only that the conflict is clear and significant (not minor) but that the planning strategy, with which the proposal conflicts, is also reflected in the Draft Planning Scheme and that the planning need case to depart from the Council's strategy is not strong. Whilst I have also had regard to the matters which otherwise weigh in favour of the proposal (including the matters of benefit discussed earlier) I am, on balance, unpersuaded that those warrant a departure from the Council's clear strategy in the context of a need case which is not strong. My conclusion may have been different had the need been substantially stronger."

Planning Scheme Amendment Background

Council resolved to progress a planning scheme amendment in July 2015 for the sites the subject of this application.

The purpose and general effect of the planning scheme amendment was to:-

- a. amend the zoning of land, referred to as Twin Waters West, located at Pacific Paradise, from the Rural zone to the Emerging community zone and include the Twin Waters West land within the Maroochy North Shore local plan area and inside the Urban Growth Management Boundary;
- amend the Maroochy North Shore Local plan code, to include specific provisions to guide future development of the Twin Waters West land for residential purposes; and
- c. undertake all necessary consequential amendments to other parts of the planning scheme for consistency with the above amendments.

Since the Court decision and following commencement of the Sunshine Coast Planning Scheme 2014, the proponent prepared a revised conceptual master plan for development of the subject land and has undertaken further community consultation with the local community association and other community stakeholder groups. The revised conceptual master plan incorporates approximately 650-700 residential lots based on a waterway system similar to the existing Twin Waters residential community and is considered to be more consistent with local community expectations compared with the previous development application, particularly in terms of character, density and scale.

Importantly, given previous reservations from the local community in relation to development of the subject land, Council required demonstration of community consultation and community support for development of the Twin Waters West land, before contemplating a planning scheme amendment process. Following consultation with the proponent, the local community association has subsequently indicated its conditional support for development of the subject land. The planning scheme amendment seeks to ensure any such development is consistent with local community expectations.

Permission was given by the State Government to notify the amendment (July 2016) and public notification occurred between 26 September 2016 to 7 November 2016.

Council resolved on 13 April 2017 (SM17/16) to support the amendment. The proposed planning scheme amendment, with changes, was forwarded to the Planning Minister on 28 April 2017, for approval.

During the final state interest review process, the Department of Infrastructure, Local Government and Planning (the Department) commissioned an independent review of the flood modelling used by Council to inform the proposed amendment. The review found that the flood model and flood impact assessment used by Council was suitable for the purpose of informing the planning scheme amendment and recommended a number of improvements be made to the model to assist with the assessment of future development applications.

Based on the findings of the review, the Department was satisfied that the Twin Waters West land is suitable to be zoned for urban purposes and that the proposed amendment

satisfies the requirements of the State Planning Policy relating to natural hazards, which includes flooding.

On 1 March 2018, Council received advice from the Planning Minister that Council may proceed to adopt the proposed planning scheme amendment, subject to conditions.

Council adopted the *Sunshine Coast Planning Scheme 2014 (Major Amendment) No. 12* on 8 March 2018. The amendment was gazetted on 9 March 2018 and took effect on 19 March 2018.

Application Process

Upon lodgement in December 2018, this development application proposed:

- Preliminary Approval for Material Change of Use of Premises (including a Variation Request to vary the effect of the Sunshine Coast Planning Scheme 2014) for Residential, Business, Community and Sport and Recreation uses; and
- Development Permit to Reconfigure a Lot (4 Lots into 184 Lots, including 172 residential lots, a community facility lot, a multiple dwelling unit lot, new road, parks and balance lot, over 2 Stages).

Following the statutory process, the applicant lodged a change to the application on 15 October 2019. This change to the application was in response to concerns raised from the Department of State Development, Manufacturing, Infrastructure & Planning (DSDMIP) in their role as the State Assessment and Referral Agency (SARA) in relation to the potential for the current reconfiguration application to preclude any future operational works application involving marine plants from being referrable to the Department of Agriculture and Fisheries (DAF), under the Planning Regulation 2017.

On this basis, the applicant amended the reconfiguring a lot proposal to remove those components of the proposed subdivision that impact on the existing marine plants contained within Easement B RP181894 & Easement C RP181893 (removing the proposed multiple dwelling unit site in Stage 2).

As these changes were in response to the State Government Further Advice Letter, the application process did not restart or require re-notification of the application as per Section 52(1) of the *Planning Act 2016* and Part 26 of the *Development Assessment Rules*.

Therefore, the proposal assessed in this report is for:

- Preliminary Approval for Material Change of Use of Premises (including a Variation Request to vary the effect of the Sunshine Coast Planning Scheme 2014) for Residential, Business, Community and Sport and Recreation uses
- Development Permit to Reconfigure a Lot (4 Lots into 182 Lots, new road, park and balance lot, over 2 Stages).

ASSESSMENT:

The application requests two separate approvals. These are:

- Preliminary Approval for Material Change of Use of Premises (including a Variation Request to vary the effect of the Sunshine Coast Planning Scheme 2014) for Residential, Business, Community, and Sport & Recreation uses
- Development Permit to Reconfigure a Lot (4 Lots into 182 Lots, new road, park and balance lot, over 2 Stages)

The assessment of these applications is undertaken in the same order as that listed above. This is because the second application is reflective of the development proposed by the Twin Waters West Master Plan.

Framework for Assessment

Categorising Instruments for Statutory Assessment

For the *Planning Act 2016*, the following categorising instruments may contain assessment benchmarks applicable to development applications:

- the Planning Regulation 2017
- the Planning Scheme for the local government area
- any temporary local planning instrument
- any variation approval

Of these, the planning instruments relevant to this application are discussed in this report.

Assessment Benchmarks Related to the Planning Regulation 2017

The *Planning Regulation 2017* (the Regulation) prescribes assessment benchmarks that the application must be carried out against, which are additional or alternative to the assessment benchmarks contained in council's Planning Scheme. These assessment benchmarks may be contained within:

- the SEQ Regional Plan and Part E of the State Planning Policy, to the extent they are not appropriately integrated into the Planning Scheme; and
- Schedule 10 of the Regulation.

PLANNING REGULATION 2017 DETAILS		
Applicable Assessment Benchmarks:	State Planning Policy ● Part E	
	Schedule 10 of the Regulation • Part 8: Heritage places	

State Planning Policy (SPP), Part E

Since the time the *Sunshine Coast Planning Scheme* commenced on 21 May 2014, a new State Planning Policy came into effect on 3 July 2017 and must be considered for development assessment to the extent the State Planning Policy is inconsistent with the planning scheme.

The assessment benchmarks of the SPP Part E that are relevant to the development proposal do not vary the current provisions of the Planning Scheme.

State Planning Policy – Water quality

The State Planning Policy relating to water quality is considered in the *Stormwater management code* for operational water quality management. During the construction phase, erosion and sediment control should be managed using best practice methods to achieve the State Planning Policy requirements for runoff from the site. The management of floodwaters through the site during the construction phase, in a way which avoids the floodwaters either eroding the site or transporting sediment laden water from the site, will be critical and conditions could be included in the event of approval.

State Planning Policy – Natural hazards, risk and resilience

The Flood hazard overlay code and Maroochy North Shore local plan code broadly consider the matters raised in the State Planning Policy relating to Natural hazards, risk and resilience.

Where the State Planning Policy requirements are not fully reflected in the planning scheme codes is that development mitigates risks to people and property to an acceptable and tolerable level. However, the State Planning Policy does not provide criteria for what an acceptable and tolerable level is. Council has recently considered this and presented the methodology in the Draft Flooding and Stormwater Management Guidelines. The methodology is presented below:

Table 9 Flood Hazard Classifications

Flood Hazard Category	Description	Depth- Velocity Limit	Depth Limit	Velocity Limit
H1	Generally safe for vehicles, people and buildings	≤ 0.3 m²/s	≤ 0.3 m	≤ 2.0 m/s
H2	Unsafe for small vehicles.	≤ 0.6 m ² /s	≤ 0.5 m	≤ 2.0 m/s
Н3	Unsafe for vehicles, children and the elderly	≤ 0.6 m²/s	≤ 1.2 m	≤ 2.0 m/s
H4	Unsafe for vehicles and people.	≤ 1.0 m²/s	≤ 2.0 m	≤ 2.0 m/s
Н5	Unsafe for vehicles and people. All building types vulnerable to structural damage	≤ 4.0 m²/s	≤ 4.0 m	≤ 4.0 m/s
Н6	Unsafe for vehicles and people. All building types considered vulnerable to failure	> 4.0 m ² /s	> 4.0 m	> 4.0 m/s

Table 10 Hydraulic Risk Matrix for New Development

		Flood Hazard Category					
		H1	H2	H3	H4	H5	Н6
Likelihood	PMF						
	1 in 2000 AEP						
	1 in 100 AEP						
	10% AEP						

Acceptable Risk
Unacceptable Risk

Figure 7 - Acceptable Flood Risk Criteria

The above methodology is used for the purposes of assessment. The assessment below indicates that the applicant has demonstrated that the development has an acceptable flood risk. It is important to note that in addition to the above quantitative risk assessment approach, the safety of people is also required to be addressed for the residual flood risk through a combination of refuge and evacuation strategies, which are detailed further in the Assessment Benchmarks section below.

Liveable communities - Fire services

The proposed development can be conditioned to comply with the requirements of the State Planning Policy in regard to the provision of fire hydrants and site access for fire services.

Mining and extractive resources

A Key Resource Area (KRA No 150) is identified on the western side of the Sunshine Motorway extending across David Low Way, and covering the existing Maroochy River Golf Club.

The development involves increasing the number of people working or residing near the key resource area. This matter is addressed in further detail in the body of the report.

Schedule 10 of the Regulation

The development involves a Local Heritage Place (refer Part 8 of the *Planning Regulations 2017*). The Regulations identify that the application must be assessed against the relevant assessment benchmarks in the *Sunshine Coast Planning Scheme 2014*.

South East Queensland Regional Plan (SEQRP)

The development is located within the Urban Footprint of the South East Queensland Regional Plan. Having regard to the South East Queensland Regional Plan, the development is broadly consistent with the outcomes expressed and sought to be achieved by the South East Queensland Regional Plan.

The South East Queensland Regional Plan provides a regional framework for growth management, and sets planning direction for sustainable growth, global economic competitiveness and high-quality living by:

- identifying a long-term sustainable pattern of development which focuses more growth in existing urban areas;
- ensuring land use and infrastructure planning are integrated;
- valuing and protecting the natural environment, productive land, resources, landscapes and cultural heritage;
- · promoting more choice of housing and lifestyle options; and
- promoting vibrant, fair, healthy and affordable living and housing to meet all of the community's needs.

The above components of the South East Queensland Regional Plan are discussed, where relevant, within the body of this report.

Assessment Benchmarks Related to the Planning Scheme

The application has been assessed against the *Sunshine Coast Planning Scheme 2014*. The pertinent issues arising out of assessment against the codes are discussed below:

Strategic Framework

The Strategic Framework is an Assessment Benchmark for Impact Assessable applications and considers the following matters:

- Settlement Pattern
- Economic Development
- Transport
- Infrastructure and Services
- Natural Environment
- Community Identity, Character and Social Inclusion
- Natural Resources
- Natural Hazards

The Strategic Framework sets the policy direction for the planning scheme and forms the basis for ensuring appropriate development occurs within the life of the planning scheme.

The application has been assessed against each of the matters above. The pertinent issues arising out of the assessment against the Strategic Framework are discussed below.

The site is identified as an Urban area in the Strategic Framework of the *Sunshine Coast Planning Scheme 2014*, is located within the local growth management boundary and is intended to accommodate residential development.

The Strategic Framework contains several policy directions that are of direct relevance to the consideration of this application, as follows:-

Theme 1 – Settlement pattern, Element 1 – Character, lifestyle and environment attributes (Specific outcomes) s. 3.3.2.1

"The character, lifestyle and environment attributes of the Sunshine Coast are recognised as essential contributors to the region's natural (competitive) advantage by:-

- (i) protecting and enhancing the natural environment and undeveloped rural and coastal landscapes that create large, uninterrupted and diverse areas of open space which weave throughout the region and define the boundaries of urban and rural residential areas:
- (iii) maintaining distinct, identifiable towns and neighbourhoods that sensitively respond to their setting and support strong, diverse communities with a sense of belonging;"

Theme 1 – Settlement pattern, Element 8 – Local settings and local planning responses (Specific outcomes)

"The Sunshine Coast is maintained as a community of communities where the character and identity of each community is recognised and protected in accordance with a local plan."

Theme 2 – Economic Development, Element 2 – Sunshine Coast activity centre network (Specific outcomes) s. 3.4.3.1

(c) Development does not undermine or compromise the activity centre network either by inappropriately establishing centre activities outside of an activity centre or proposing a higher order or larger scale of uses than intended for a particular activity centre.

Theme 3 – Transport, Element 1 – Integrated transport system. s3.5.2.1

- (a) An integrated, safe and functional transport system is provided that allows for the efficient movement of people and goods and connects to and enhances State and National transport networks.
- (e) A permeable and legible (grid or modified grid) street pattern is used in the layout of new development to provide a high level of connectivity, particularly for pedestrians and cyclists.

Theme 3 – Transport, Element 3 – Active transport network. s3.5.4.1

- (c) To maximise opportunities for walking and cycling:-
 - urban areas and residential neighbourhoods are designed to incorporate permeable and legible (grid or modified grid) street networks with appropriate lighting and casual surveillance to facilitate safe and convenient use by pedestrians and cyclists;
 - (iv) development supports and contributes to pedestrian, cycling and recreational trails to link public park infrastructure within urban areas and externally to the wider open space network for the Sunshine Coast Region;

Theme 4 – Infrastructure and services, 3.6.1 (Strategic outcomes)

- (b) Infrastructure and services are designed to maximise the capacity and flexibility of existing and proposed networks, ensure the efficient use of natural resources and avoid or minimise adverse environmental and community impacts.
- (f) Stormwater is managed as part of an integrated water management approach to preserve environmental flows, protect and enhance water quality and maximise opportunities for the reclamation and reuse of stormwater.
- (j) Communities have access to high quality and well located open space and community facilities which are easy to access, contribute to the character and identity of places and improve opportunities for active living, community health and wellbeing and social inclusion.

Theme 5 – Natural Environment, Element 1 – Natural habitats and biodiversity. s3.7.2.1

- (a) Development is located, designed, constructed and operated to avoid, as far as practicable, or where avoidance is not practicable, minimise and mitigate, adverse impacts on the ecologically important areas identified conceptually on Strategic Framework Map SFM 5 (Natural environment elements) which include remnant and regrowth native vegetation, riparian areas and natural waterways, wetlands and waterbodies.
- (b) Habitat for endangered, vulnerable, rare and other regionally and locally significant flora and fauna species is protected and enhanced with mitigation measures for species recovery implemented.
- (d) Ecological buffers, fauna fencing, supplementary planting to prevent edge effects and other measures as appropriate are provided to mitigate adverse impacts from development on land adjacent to an ecologically important area.

Theme 6 – Community identity, character and social inclusion, Element 1 – Landscape elements and features (Specific outcomes) s.3.8.2.1

(d) Scenic routes are protected and enhanced as major transport routes providing a high level of scenic and visual amenity to travellers.

Theme 6 – Community identity, character and social inclusion, Element 2 – Subtropical character and locally responsive design (Specific outcomes) s.3.8.3.1

(d) The height of buildings and other structures recognises the distinctive character and amenity of the Sunshine Coast as a place with a predominantly low-medium rise built form which is intentionally distinct from other places in metropolitan South East Queensland.

Theme 6 – Community identity, character and social inclusion, Element 3 – Cultural heritage and character (Specific outcomes) s.3.8.2.1

(a) Places of cultural heritage significance, including areas of built environment character, areas of streetscape and landscape heritage, and Aboriginal and non-aboriginal places are protected.

Where applicable, the above statements are considered as part of the assessment below against the relevant codes.

PRELIMINARY APPROVAL INVOLVING A VARIATION REQUEST

Under section 61 of the *Planning Act 2016*, a preliminary approval can also include a request for a variation approval, which varies the effect of a local planning instrument on premises the subject of the approval. A variation approval may establish new categories of assessment and assessment benchmarks for development and any related development and prevails over a local planning instrument to the extent of any inconsistency for the "life" of the approval, or until the development is completed.

This type of Preliminary Approval may establish specific assessment provisions that will then apply in assessing any future development applications relating to the land. A preliminary approval may seek to:

- vary or add the provisions of a relevant code; or
- vary the level of assessment and assessment benchmarks for future applications.

The assessment of the part of a development application that is a variation request is distinct from and requires assessment of the proposed development. This is because the assessment of the proposed development is carried out against the planning instruments at the time the development application is made to determine whether the development is suitable for the site.

The outcome of this assessment informs the assessment and decision of the part of the development application that proposes to vary the local planning instrument. The proposed variations are not assessed unless the development the subject of the development application is to be approved. If the other parts of the development application are refused, any proposed variations will also be refused.

Given this, the proposal to create the new estate is assessed against the planning scheme.

Proposed Layout of Development

The Preliminary Approval for Material Change of Use of Premises (including a Variation Request to vary the effect of the *Sunshine Coast Planning Scheme 2014*) for Residential, Business, Community and Sport and Recreation uses identifies area for future development for residential, community/commercial uses and open space areas.



Figure 8 - Proposed Precincts

The site is affected by a number of overlays including:

- Acid Sulfate Soils
- Airport Environs
- Biodiversity, Waterways and Wetlands
- Bushfire Hazard
- Extractive Resources
- Flood Hazard
- Height of Buildings and Structures
- Heritage and Character Areas
- Regional Infrastructure
- Scenic Amenity

These overlays and the additional requirements in the *Maroochy North Shore local plan code* should be considered to establish the confines of any developable area or areas where development is not appropriate. This assessment is undertaken considering the following factors:

- Vegetated and Ecological Buffers/Linkages
- Recreation and Passive Open Space
- Flooding and Hydrology
- Building Height
- Density
- Heritage and Character Areas
- Access Movements
- Extractive Resources
- Bushfire
- Airport Matters
- Acid Sulfate Soils
- Acoustic Amenity

Vegetated and Ecological Buffers/Linkages

Through the purpose and overall outcomes, the *Biodiversity, waterways and wetlands* overlay code broadly intends to

- protect and enhance ecologically important areas and ecological connectivity;
- protect and establish appropriate buffers to waterways, wetlands, native vegetation and significant fauna habitat;
- protect known populations and supporting habitat of rare and threatened flora and fauna species, as listed in the State Nature Conservation Act 1992, Nature Conservation (Wildlife) Regulation 2006 and the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999; and
- ensure development is located, designed and managed to avoid or minimise adverse direct or indirect impacts on ecological systems and processes;

Further, the *Maroochy North Shore local plan code* identifies specific buffers and linkages to ecologically important areas, highest astronomical tide areas and the Sunshine Motorway.

The relevant acceptable outcomes include:

- AO35.1 Development does not occur within the Conservation and rehabilitation area identified on Figure 7.2.18A (Maroochy North Shore local plan elements).
- AO35.2 Development provides for a rehabilitated buffer where identified on Figure 7.2.18A (Maroochy North Shore local plan elements), with a minimum width of:-
 - (a) 30 metres around all edges of the ecologically important area on Lot 2 on RP103117;
 - (b) 50 metres from the south-eastern boundary of the site, linking the ecological important areas to the north and south; and
 - (c) 150 metres measured from the Highest Astronomical Tide (HAT).
- AO36 Development adjacent to the Sunshine Motorway and the proposed Dedicated Public Transport Corridor (CAMCOS) provides a densely planted landscape buffer along the full frontage of the site, which:-
 - (a) is located separate to the proposed Dedicated Public Transport Corridor (CAMCOS);
 - (b) has a minimum width of 40 metres; and
 - (c) incorporates fencing wholly contained within the site at the eastern edge of the landscape buffer.

The development proposes the following:

- No development occurring in the conservation and rehabilitation area noted in the local plan code complying with the local plan code;
- Minimum 30 metre buffer on the northern side of the centrally located ecologically important area complying with the acceptable outcomes of the local plan code;
- Minimum 10.5 metre buffer on the northern side of the western interface to the ecologically important area in lieu of 30 metres (30 metres provided including the road reserve);
- Minimum 13.2 metre buffer in the southern side of the western interface of the ecologically important areas in lieu of 30 metres (30 metres provided including the road reserve);
- Minimum 15 metre buffer to the southern interface to the ecologically important areas in lieu of 30 metres (30 metres provided including the road reserve);
- Minimum 30 metre buffer to the proposed medium density development within the cleared area surrounded by the ecological important area;
- Minimum 35.5 metre buffer along the eastern boundary of the site linking the
 ecological important areas to the north and south in lieu of 50 metres (50 metres
 provided including road reserve);
- Minimum 100 metre buffer (with an average of 150 metres) to the highest astronomical tide in lieu of 150 metres
- Minimum 20 metre buffer to the Sunshine Motorway in lieu of 40 metres

These are depicted on the below plan.

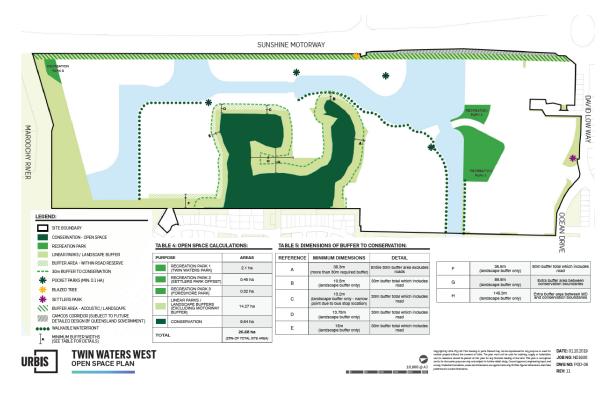


Figure 9 - Proposed Open Space Plan

The associated performance outcomes identifies:

PO35 Development in the Emerging community zone provides for:-

- (a) the protection, buffering, connection and rehabilitation of ecologically important areas (including the Maroochy River and the Maroochy River Conservation Area) and the Conservation and rehabilitation areas identified on Figure 7.2.18A (Maroochy North Shore local plan elements); and
- (b) the management of coastal hazards and coastal processes to protect land vulnerable to coastal erosion and tidal inundation.

PO36 Development in the Emerging community zone provides for a substantial landscape buffer and separation area to the Sunshine Motorway and the proposed Dedicated Public Transport Corridor (CAMCOS), in order to provide effective visual and acoustic separation and screening.

Assessment against the performance outcomes is provided below for each of the buffers.

Buffer to central ecological important area

As noted above, the development does not provide the minimum 30 metre rehabilitated buffer to the ecological important area with the proposed:

- Minimum 10.5 metre buffer on the northern side of the western interface to the ecologically important area in lieu of 30 metres (30 metres provided including the road reserve);
- Minimum 13.2 metre buffer in the southern side of the western interface of the ecologically important areas in lieu of 30 metres (30 metres provided including the road reserve); and
- Minimum 15 metre buffer to the southern interface to the ecologically important areas in lieu of 30 metres (30 metres provided including the road reserve).



Figure 10 - Proposed Setbacks to Ecological Important Area

It is important to identify the reasons why the central area is defined as ecologically important area.

An ecological important area is defined in the planning scheme as

Except where separately defined in a structure plan, means:-

- (a) a natural waterway or wetland;
- (b) an area of remnant or non-remnant native vegetation identified on a Biodiversity, Waterways and Wetlands Overlay Map; or
- (c) an area which otherwise:-
 - (i) contains or is likely habitat for scheduled species under the Nature Conservation (Wildlife) Regulation (Qld) 2006;
 - (ii) contains or is likely to contain listed threatened species and/or ecological communities, protected critical habitat or listed migratory species as defined by the Environmental Protection and Biodiversity Conservation (Cth) Act 1999;
 - (iii) contains a spring as defined under the Water Act (Qld) 2000; or
 - (iv) contains habitat for flora and/or fauna species of local ecological significance.

Both the applicant's and Council's ecological assessments conclude that the central wetland supports locally important wildlife habitat values, habitat values for fauna listed as threatened under both Commonwealth and State conservation legislation, and locally threatened fauna including the Eastern Grey Kangaroo.

Council sought external advice from an ecological expert, who raise concerns with development in the central area for medium density residential purposes for the following reasons:

- A significant part of the grassy setback to the central wetland will not be
 accessible to kangaroos given the current alignment of exclusion fencing.
 Setback areas will be used for bioretention of urban runoff as part of the
 proposed stormwater treatment train. Typically, these structures are inundated
 and the suite of flora (for functional reasons) is dominated by sedge, rush or reed
 species. Such conditions and resources do not represent kangaroo grazing
 habitat.
- There also remains uncertainty in regard to the management of the open space along the southern side of the site (no kangaroo exclusion fencing) and the retention of a recreation park within the habitat and movement corridor. Furthermore, when information within the landscape response is taken into account, it would appear that the rehabilitation treatments for areas of open space which currently support kangaroo habitat, including open grassed buffers (feeding habitat), will result in the reduction of habitat values for kangaroos.
- Were the development to proceed as proposed, it is reasonable to expect that kangaroo numbers would decline. Whilst kangaroos have to date, been able to persist in and around the adjacent Twin Waters East development, the contribution of the subject site in its undeveloped state is not known, though assumed to be important. There is a real prospect that developing the subject land as proposed, will contribute over time to a cumulative impact on the local population which could result in the local extinction of Eastern Grey Kangaroos.
- Maintenance of wetland functionality through provision of adequate buffers and avoiding groundwater and surface water quality impacts to the wetland, have yet to be satisfactorily demonstrated.

On this basis, the central area abutting the ecological important area of 17,397 m² is not suitable for residential development given the potential impacts on kangaroo population and the freshwater wetland located in this area. On this basis, this central area is recommended to be converted to open space and dedicated to Council.

The resident kangaroo population can be protected with several conservation and management measures including protective fencing, exclusion of dogs, road underpasses, provision of grazing and movement corridors and an interim Kangaroo Management Plan (for civil/bulk earthworks) and a subsequent final Kangaroo Management Plan.

External to the ecological important area, the buffers vary in width in an attempt to address the design constraints, drainage, elevation and vegetation. However, in all instances buffers include the road and street network which is an accepted reserve management practice, and is consistent with the definition of a buffer as defined in the Sunshine Coast Planning Scheme 2014 being an area required for ecological, acoustic or scenic amenity protection purposes that incorporates a separation distance and associated landscape, structures and works:-

- (a) between different land uses;
- (b) from a major noise source;
- (c) from a conservation area or a public recreation area; or
- (d) from a wetland, waterway or waterbody.

In addition to the acquisition of the 17,397 m² central area, the ecological important area can be protected with appropriate vegetated buffers to allow for sufficient rehabilitation of ecologically important areas.

Buffer linking ecological important areas to the north and south
As noted above, the proposal includes a minimum 35.5 metre buffer along the eastern
boundary of the site linking the ecological important areas to the north and south in lieu
of 50 metres (50 metres provided including road reserve).

This link is important as it provides an ecological connection from the ecological important area for fauna movement to the Maroochy River Conservation Area in the south.

The fauna movement can be accommodated in the 35.5 metres with several conservation and management measures including protective fencing, exclusion of dogs, road underpasses, provision of grazing and movement corridors and a Kangaroo Management Plan (for civil/bulk earthworks) and a subsequent final Kangaroo Management Plan for residents in the area.

A 50 metre buffer is provided along the eastern boundary of the site including the road and street network which is an accepted reserve management practice, and is consistent with the definition of a buffer as defined in the *Sunshine Coast Planning Scheme 2014*.

With the acquisition of the 17,397 m² central area, the link is for fauna movement, rather than for prolonged grazing. The fauna movement corridor can be protected with appropriate vegetated buffers to allow for sufficient rehabilitation and linkages between ecologically important areas.

Buffer to Highest Astronomical Tide

As noted above, the proposal provides a minimum 100 metre buffer (with an average of 150 metres) to the highest astronomical tide in lieu of 150 metres.

The buffer width is intended to provide for the protection, buffering, connection and rehabilitation of ecologically important areas (including the Maroochy River and the Maroochy River Conservation Area) and the management of coastal hazards and coastal processes. It is also considered that the buffer needs to be of sufficient width that minimises sight lines through to the estuarine wetland vegetation (mangrove and saltmarsh vegetation) located to the south of the Twin Waters West land, as the mangrove and saltmarsh vegetation communities are highly susceptible to degradation from unmanaged public access. There may also be opportunity for some of the buffer areas to accommodate linear open space and the coastal pathway.

Given the irregularity of the highest astronomical tide line, the applicant has proposed to average the buffer to establish a more regular delineation of the offset line for development as shown below.

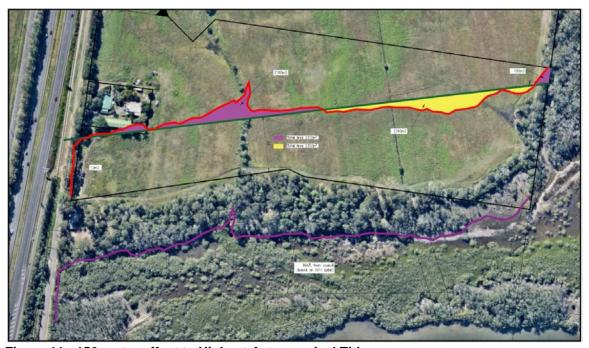


Figure 11 - 150 metre offset to Highest Astronomical Tide

The associated performance outcome identifies:

PO35 Development in the Emerging community zone provides for:-

(a) the protection, buffering, connection and rehabilitation of ecologically important areas (including the Maroochy River and the Maroochy River Conservation Area) and the Conservation and rehabilitation areas identified on Figure 7.2.18A (Maroochy North Shore local plan elements); and

(b) the management of coastal hazards and coastal processes to protect land vulnerable to coastal erosion and tidal inundation.

The ecological attributes of the highest astronomical tide area provides important foraging areas for wetland birds. These areas combined with the Finland Road and Maroochy River Golf Course areas support the highest birdlife species/records on the Sunshine Coast.

The areas below the highest astronomical tide areas are shown within an open space reserve and where removed for the lake interchange/fish passage will be "offset" as required by the State Government (see Concurrence agency response).

The application of the buffers is considered necessary to deliver hydrological, habitat and water quality outcomes. Mangrove and saltmarsh vegetation communities are susceptible to degradation from unmanaged public access, with any permitted access to these areas on formalised boardwalks (see *Pedestrian Connection and Coastal Pathway* section of this report).

The proposed straight line for the northern limit of the buffer, while resulting in a buffer width below 150m in some sections, is considered sufficient to support the outcomes required above, including local wildlife refuge and movement. The average width would remain 50m greater than the common standard buffer width of 100m to wetland areas, to offset impacts from the adjacent intensified land use. This also more than accommodates the erosion prone area (40m outwards from HAT). The resulting footprint of the restored natural vegetation would also be more practical to manage in future.

Buffer to Sunshine Motorway/CAMCOS

As noted above, the proposal provides a minimum 20 metre buffer to the Sunshine Motorway in lieu of 40 metres. The buffer width of 40 metres was intended along the full frontage of the western boundary of the Twin Waters West land due to a level of uncertainty in relation to the proposed dedicated Caboolture to Maroochydore Corridor Study (shortened to CAMCOS) corridor alignment. This is to ensure development in the Emerging community zone (Twin Waters West) does not compromise the provision or operation of the proposed dedicated CAMCOS corridor or State controlled roads (e.g. Sunshine Motorway) and provides for effective visual and acoustic separation and screening as well as the provision of a regional pedestrian and cycle path adjacent to the Sunshine Motorway and the proposed dedicated CAMCOS corridor.

The Maroochy North Shore local plan code states that

PO27 Development in the Emerging community zone does not compromise the provision or operation of the proposed Dedicated Public Transport Corridor (CAMCOS).

This is supported by the *Regional infrastructure overlay code* where it states:

- PO10 Development adjacent to an existing or planned dedicated public transport corridor and buffer, as identified on a Regional Infrastructure Overlay Map, is:-
 - (a) compatible with the nature and function of the corridor; and

(b) does not compromise the operational efficiency of the corridor.

Further, the *Scenic amenity overlay code* identifies that the Sunshine Motorway is a scenic route, and needs to achieve compliance with the below performance outcome.

- PO1 Development does not detract from the visual amenity of a scenic route and:-
 - (a) is visually unobtrusive, relative to its urban or nonurban setting and surroundings, when viewed from the scenic route;
 - (b) maintains or enhances important view corridors or distance views from the scenic route to significant landscape features; and
 - (c) is low key, both visually and in scale, so as not to detract from the scenic amenity offered from the scenic route.

As background to the CAMCOS, in 1998, the Queensland Government investigated an integrated land use and public transportation system for the Caboolture to Sunshine Coast region. The Caboolture to Maroochydore Corridor Study (shortened to CAMCOS) was completed in 2001. The study investigated the feasibility, preferred development, impacts and benefits of a new public transportation corridor between Beerwah and the Sunshine Coast Airport. This included identifying the preferred route for any public transport corridor and the preferred public transport mode (for example, busway, heavy rail, light rail etc).

There is an alignment which could extend the rail corridor through to Maroochydore Airport, as shown below.

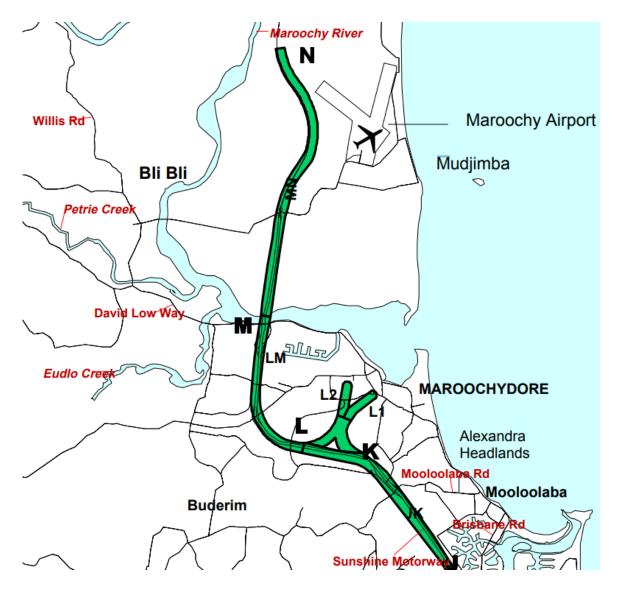


Figure 12 - Preferred Route for Caboolture to Maroochydore Corridor Study

In the Corridor Assessment Report prepared in September 1998, the State Government identify that it is considered unlikely that demand for the rail facility can be justified by airport passengers alone. There is considerable expense involved in continuing the corridor through to the airport.

The CAMCOS Corridor is less likely to vary as there are limited options connecting Maroochydore and the Sunshine Coast Airport. The corridor is identified to be located within and along the eastern boundary of the motorway reserve. Alignments and levels are subject to planning proposals for motorway widening and the upgrading of intersections. Broadly, it is likely that the alignment is generally at grade apart from the crossing of the David Low Way intersection.

Stage 3 of the CAMCOS project (yet to be commenced by the State Government for this section of CAMCOS) is intended to nominate a final width of 20-40 metres to accommodate any necessary mitigation measures e.g. visual or noise barriers etc.

This is based on the below cross section showing a 40 metre corridor consisting of

- 15.5 metres of formation level with two possible track lines and a maintenance track;
- 10 metre buffer on one side containing drainage infrastructure;
- 6 metres of buffer on the other side; and
- Batters on either side to the buffer areas of varying width.

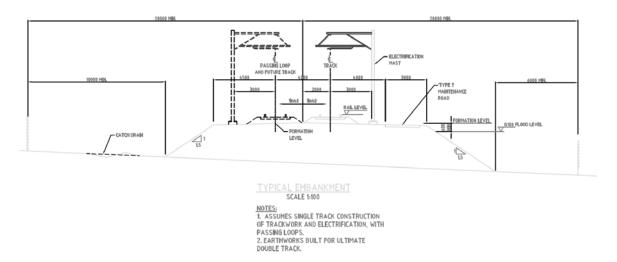


Figure 13 - Cross Section of CAMCOS Corridor

The Department of Transport and Main Roads are yet to identify a specific design for the CAMCOS corridor future infrastructure provisions and therefore the specific width of the corridor is still unknown for this section of CAMCOS. This corridor is unlikely to be required in the short to medium term, but protected to preserve the corridor to occur unencumbered if and when the CAMCOS is required to be delivered.

However, the existing Godfreys Road road reserve is available to be utilised for CAMCOS purposes along the south-western segment, with a land dedication provided in the north-western segment from the point where the Godfreys Rd road reserve terminates. This is due to all access being achieved internally though the site, and the demand for a road network not being present in this location. This allows for a minimum width of 20 metres without considering the subject site.

In the event of approval, the Twin Waters West development would provide an acoustic barrier, mostly in private land ownership, behind a proposed 20 metre vegetated buffer.

The proposed 20 metre buffer proposed would screen the development from the Sunshine Motorway and is likely to be in place for the medium term (as CAMCOS is unlikely to be delivered in this location for at least 10 years if not longer).

If the proposed 20 metres buffer is accepted, there is a risk that the State Government will require some or all of the land from within this vegetated buffer area to accommodate the CAMCOS public transport link in the future. This would address the *Regional infrastructure overlay code* as there is a 40 metre wide area capable of being used for CAMCOS. However, in their role as a concurrence agency, the State Government have not nominated any width or additional land requirements, presumably because the State may potentially remove all or part of the vegetation to accommodate

the public transport network as part of future acquisition processes as detailed design progresses.

However, in the event that CAMCOS proceeds at some stage in the future, it is likely that parts of the vegetated buffer could be retained within the edge buffers (of 6 to 10 metres) or the battered slope (which would assist with stabilising this area). Further, the State Government would need to review the acoustic barrier effectiveness, as traffic noise sources may be closer or additional (e.g. light rail) to provide improved barrier attenuation if warranted.

Other sites around the Sunshine Coast, such as Brightwater and Kawana Island, have achieved suitable vegetated screening within 5 - 10 metres depending on species selection. In the event of approval, the vegetated buffer is intended to be dedicated to Council in freehold, giving the opportunity for further discussions with the State Government if further land is required to allow for a suitable buffer.

On this basis, the proposed 20 metre landscape buffer can be accepted.

Recreation and Passive Open Space

The Maroochy North Shore local plan code identifies that, in partial fulfilment of Acceptable Outcome PO34 below that

- AO34 Development provides for a minimum of 25% of the total site area as public open space, exclusive of waterbodies and waterways, and may include the following:-
 - (a) walkable waterfront areas and linear parks; and
 - (b) conservation areas and buffers.

The associated performance outcome states:

- PO34 Development in the Emerging community zone provides for an open space network that has sufficient area and is configured in a manner that:-
 - (a) meets the open space and recreational needs of residents and visitors; and
 - (b) maximises public access to the waterfront.

To meet the above requirements, the open space contribution should equate to 26.1 ha (261,904 m2 based on 25% of the site area).

The proposal identifies the following open space areas, totalling 26.68 ha, shown on the below plan:

- Recreation Park 1 2.04 ha
- Recreation Park 2 0.45 ha
- Recreation Park 3 0.32 ha
- Linear Parks 14.27 ha (this excludes the buffer to the Sunshine Motorway)
- Central Conservation Area 9.54 ha

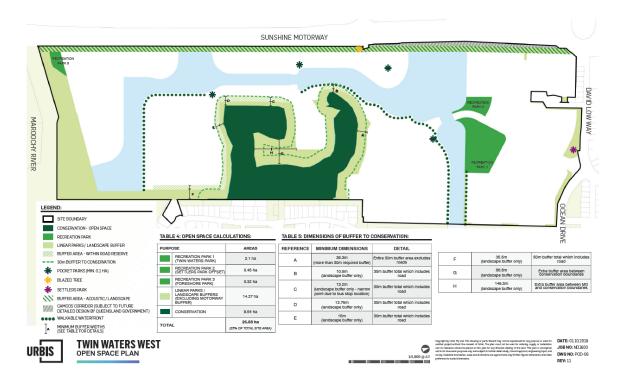


Figure 14 - Proposed Open Space Plan

In relation to the above plan, it is recognised that Settlers Park is reduced in size as this is the nominated entry location in the local plan code. This is considered in the planning scheme in the below acceptable outcome

- AO30 Development ensures that any reconfiguring of boundaries of Settler's Park required to accommodate upgrading of the David Low Way/Ocean Drive intersection, achieves the following:-
 - (a) no net loss in the size of the park area;
 - (b) no reduction in park embellishments;
 - (c) improved levels of protection for all mango trees within the park with a minimum curtilage around the mango trees of 15 metres to the east and west and 10 metres to the north and south; and
 - (d) high quality streetscape and landscape treatments that enhance the setting and interpretation of the local heritage place (including the in situ mango trees) and present an attractive gateway entry feature for the Pacific Paradise and Twin Waters communities.

In regards to the loss of land, Settler's Park is currently consolidated and regular in shape, and is proposed to be replaced within a linear park, which is not acceptable to Council. The linear nature of the park does not create the same value to the park area that has been taken by the entry road, and will effectively act as a buffer to the development, and not as a recreation and heritage park (which is its current value).

The associated performance outcome is stated below.

PO30 Development in the Emerging community zone provides for the protection and enhancement of Settler's park as a recreation park, local heritage

place and gateway entry feature for the Pacific Paradise and Twin Waters communities.

Consideration was given to either the park to increase in size in its current location, or the area being offset elsewhere on the site. Given a lack of parking and likely useability given its location on a roundabout or signalised intersection, the most acceptable option is to provide the offset land elsewhere on the site. The applicant's response to this matter was to offset the land in a new Park 2.

However, this option is not the most suitable location, and noting that the additional park area required for the central ecologically important area, this park is not required in this location noting the main Recreation Park 1 is located across the road. On this basis, this land can be returned for residential development.

The mango trees and associated park furniture and monument should be retained, consistent with the local plan code. As noted in the Heritage and Character Areas section of this report, conditions can be applied in the event of approval to ensure protection Settlers Park mango trees, *Mangifera indica*. Further, conditions can be applied in the event of approval regarding the landscaping treatments for the remaining section of Settlers Park.

Further, this report identifies that the central ecological important area is to be included as park. This area is 17,392 m².

As a result, the proposed open space areas, totalling 27.93 ha, are as follows:

- Recreation Park 1 2.04 ha
- Recreation Park 3 0.32 ha
- Linear Parks 14.27 ha
- Central Conservation Area 11.3 ha (112,792 m²)

This equates to 26.7% of the site, meeting the acceptable outcome.

The size and location of the open space areas are satisfy the open space needs of the residents, provides three consolidated open space areas and maximise the opportunities for open space to waterfront areas.

Summary

The assessment of the application against the *Biodiversity, waterways and wetlands* overlay code and the *Maroochy North Shore local plan code* has determined that the development complies with, or can be conditioned to comply as follows:

- Removal of the central Medium density residential site (MD2) and replace with Open space zone surrounding the central ecological important area for fauna and ecological protection measures;
- Suitable buffers are provided for visual or ecological reasons on the site; and
- 26.7% of the site is dedicated to open space (excluding the lake).

Flooding and Hydrology

The Maroochy North Shore local plan code, the Flood hazard overlay code and the Stormwater management code identify a number of key assessment matters associated with this site. Specifically, the local plan code identifies the following performance outcomes:

- PO24 Development in the Emerging community zone provides for adequate flood immunity (including safe refuge) and emergency access arrangements while avoiding any adverse off-site flooding impacts.
- PO26 Development in the Emerging community zone provides for an extension of the existing Twin Waters waterway system and the establishment and management of channels and waterbodies in a manner that:-
 - (a) protects and improves flood storage capacity;
 - (b) avoids adverse impacts on coastal processes and coastal resources;
 - (c) protects ecologically important areas and other significant environmental areas;
 - (d) does not result in an adverse change to the tidal prism of the adjacent Maroochy River;
 - (e) avoids or minimises impacts arising from:-
 - (i) altered stormwater quality and flow;
 - (ii) waste water;
 - (iii) the creation or expansion of non-tidal artificial waterways;
 - (f) avoids or minimises the release and mobilisation of nutrients that may increase the risk of algal blooms; and
 - (g) meets best practice hydraulic and environmental standards, including no deterioration in water quality in surrounding waterways, wetlands and waterbodies

These matters are assessed below.

Flood Modelling

The applicant has developed a flood model of the site, which is based on an extract of Council's flood model of the Maroochy River. The model includes a base case to represent existing site conditions and a developed case model including the proposed development. The expanded Sunshine Coast Airport with associated filling and drainage works has been included in both the base case and developed case models. The flood model have been reviewed by an external expert and the results from the base case model have been compared to Council's model and good agreement between the models has been observed.

The flood model has been tested under a range of different annual exceedance period flood events (39% (2 year annual recurrence interval), 10% (10 year annual recurrence interval), 1% (100 year annual recurrence interval) and the 1% including projected climate change at 2100), looking at local flooding (flooding in Pacific Paradise not associated with the Maroochy River) and regional flooding associated with the Maroochy River. Projected effects of climate change at 2100 have been modelled by assuming a 0.8m sea level rise and 20% increase in rainfall intensity as recommended by the Queensland Government. Maroochy River flooding produces the highest flood levels,

however local flooding has also been considered as it is not acceptable for impacts to occur to existing communities during a local flood event.

Council's flood model has been run for the 0.05% annual exceedance period (2,000 year annual recurrence interval) and this information has been used for considerations relating to flood immunity and disaster planning. The developed case model has been run to determine the probable maximum flood level and significant changes to Council's model have been made to allow for consideration of scour of the river mouth, which is expected to occur during the probable maximum flood. This is discussed in detail in the Flood Study prepared by the applicant, but essentially, the river mouth will change significantly during a probable maximum flood event due to very high velocities of floodwaters causing significant scour of the sand in the river mouth. Historical photographs following large flood events support this view that the river mouth will be subject to significant scour opening up the river mouth during large to extreme flood events.

The earthworks and lake construction is proposed to be constructed in three main phases and each of the intermediate phases has been considered in the flood study.

The following table provides a summary of the peak regional flood levels at the Twin Waters site, noting that there is some minor variation in levels as floodwaters flow from the Sunshine Motorway through the site exiting to east to the existing Twin Waters Lake and to the south to the Maroochy River.

Annual Exceedance Probability	Flood Level (m AHD)
39% (2 year annual recurrence interval)	1.37
10% (10 year annual recurrence interval)	1.59
1% (100 year annual recurrence interval)	2.18
1% climate change (100 year annual recurrence	2.95
interval with climate change)	
0.05% (2,000 year annual recurrence interval)	3.88
Probable Maximum Flood	4.80

The following figure shows the peak flood levels during the regional flood event under developed conditions for the 1% annual exceedance period flood event. The figure shows the Sunshine Motorway, most of the existing lots and roads within Twin Waters and most of the existing houses in Pacific Paradise above current climate 1% annual exceedance period flood levels. Roads within the Pacific Paradise area and in particular the area to the west of the Sunshine Motorway are shown as being inundated during this event.



Figure 15 - Developed Conditions - Regional Flood Levels – 1% annual exceedance period event

Flood Impacts

As per Performance Outcome PO9 of the *Flood hazard overlay code*; flood impacts are considered for all events up to the 1% annual exceedance period climate change event.

The results of the flood modelling show that no unacceptable flood impacts are predicted to result from the development under all of the local and regional flooding simulations run. The lake system and structures have been sized to balance flows between the eastern and southern outlets so increases in peak levels are not observed over areas of private property.

With respect to regional flood impacts, the image below shows the extent of changes in flood levels during the 1% annual exceedance period current climate flood event. This event is the critical event for existing communities as building floor levels in existing areas have been set based on current climate flood levels and the 1% annual exceedance period (100 year annual recurrence interval) event had been used for a significant period of time as the level from which freeboard to floor levels is calculated from.

The green and blue shading on the image below shows areas where there is a reduction in flood levels and this includes the paddock to the west of the Sunshine Motorway, the channel through the existing Twin Waters and within portions of the road system of Pacific Paradise. The proposed lots and a significant amount of the existing road network in Twin Waters, which is currently subject to flooding, is predicted to be free from flooding (light brown shading) during the current climate 1% annual exceedance period event.

Some increases in peak flood levels are proposed on the Maroochy River floodplain to the south east of the site. These increases are between 10 and 25mm and do not impact any existing buildings or structures or impact on any areas where buildings could be constructed. Existing floodwaters are deep in this area and the proposed increase has been assessed as not causing an unacceptable flood impact. The small increases in this area result because the development has been designed so that most of the floodwaters exit at this location rather than discharging through the existing Twin Waters lake system.



Figure 16 - Regional Flood Impacts (1% annual exceedance period event)

With respect to local flood impacts, the image below shows the extent of changes in flood levels during the 1% annual exceedance period current climate flood event. This event was run predominantly to confirm that the development would not cause flood

impacts to the David Low Way or to areas of Pacific Paradise which drain to the south. This has been demonstrated by the modelling, however some increases have been identified on the low lying vegetated land to the south of the proposed development. These increases result in levels well below regional flood levels and do not constitute an unacceptable impact as these sites have no possibility of being developed.



Figure 17 - Local Flood Impacts (1% annual exceedance period event)

The only development scenario in which offsite impacts are predicted to occur within existing residential communities was a sensitivity scenario which was undertaken to

ensure that the development of the site does not preclude other existing residential properties from being filled in the future to cater for the effects of climate change. There is no obligation for property owners to fill their properties (unless the existing building is proposed to be replaced with a new build), but Council's intention is to ensure these sites have the ability to be filled in future.

In this scenario, the base case model is with all of the existing lots filled to above the 1% annual exceedance period climate change flood level. The impacts shown on the image below are only the impacts from the development not the impacts caused by filling of the existing lots. This analysis shows that there is a predicted increase in flood levels within the David Low Way of up to 40mm. This impact has been determined to not affect the trafficability of the road as, in this scenario, the road is inundated by more than 1 metre, and is already not trafficable at that time.

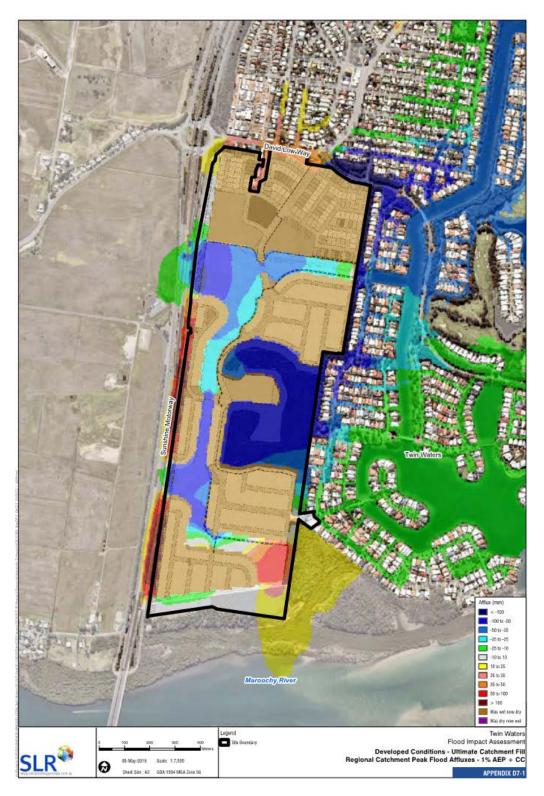


Figure 18 - Developed conditions – Ultimate catchment fill – regional flood impacts 1% annual exceedance period Climate Change event

In general, the development results in more floodwater being directed into the Maroochy River than in the existing case and as a result of this, flood levels in the existing surrounding urban areas are slightly reduced.

Flood Storage Capacity

The development is proposed to result in a loss of floodplain storage capacity during the 1% annual exceedance period flood events, which is not in accordance AO9 of the *Flood hazard overlay code*. There is an increase in flood storage capacity proposed during the more frequent 39% annual exceedance period and 10% annual exceedance period flood events. The associated, and overriding, PO9 of the Flood hazard overlay code specifies that the development does not directly, indirectly or cumulative alter flooding characteristics external to the site. Flood storage is a relevant consideration only to the cumulative aspect of flood impacts as the direct and indirect impacts are identified through the flood modelling. A loss of floodplain storage capacity is typically not approved due to the cumulative impact which can occur through cumulative loss of floodplain storage. This can occur if as part of each development it is demonstrated that each development will not cause flood impacts in isolation but due to cumulative loss of floodplain storage impacts result when all developments are considered together.

To test if the lower Maroochy River floodplain and specifically the lower Maroochy River floodplain downstream of the Sunshine Motorway is sensitive to loss of floodplain storage, the applicant ran a sensitivity analysis considering the cumulative loss of floodplain storage associated with development of the site, the airport and filling of all vacant lots with development potential (rural lots excluded). It was demonstrated through this sensitivity analysis that filling of the site would not have unacceptable adverse impacts on flood levels. Further, the development has been tested with all existing residential lots filled to be above the climate change 1% annual exceedance period. This was done so that Council can have the confidence that the proposed development will not restrict the ability for individual property owners to adapt to climate change through filling their lots. The analysis showed that there were some increases in flood levels of up to 50mm on the David Low Way resulting from this scenario but this is not an unacceptable impact as it does not affect the trafficability of the road during this event.

The reason why loss of floodplain storage within the lower Maroochy River downstream on the Sunshine Motorway is not showing unacceptable flood impacts is primarily because the closer the fill is to the mouth of the river, the less opportunity there is for storage reduction to have an adverse impact. In the lower reaches of a river system, particularly near the mouth downstream of a choke point (the Sunshine Motorway), it is the conveyance of floodwaters which is critical, rather than flood storage capacity. The proposed lake provides a more efficient flowpath across the site allowing flows to be transported through the site more quickly, thus compensating for the loss in storage capacity. This same approach would not be supported for development further up within the catchment, as this loss in storage results in the displacement of floodwaters and increase in flood levels and flowrates in the downstream floodplain.

Flood Immunity

To achieve compliance with PO3 of the *Flood hazard overlay code*, all residential lots within the development must be 0.5m above the 1% annual exceedance period including projected climate change at 2100 flood level. The 1% annual exceedance period 2100 flood level over the site ranges from 2.87m above height datum at the southern end of the lake to 2.95m above height datum at the northern end of the lake.

The development is proposed with high levels of flood immunity which are significantly higher than the flood immunity of surrounding development. The following development levels for all proposed residential lots have been conditioned:

- (a) all lots are a minimum 0.5m above the 1% annual exceedance period flood level under projected climate conditions at 2100 (3.37 to 3.45m above height datum);
- (b) floor levels at or above the 0.05% annual exceedance period flood level (3.45m above height datum);
- (c) all road levels, with the exception of areas transitioning down to existing roads (eg: The David Low Way) above 2.95m above height datum;
- (d) 4 ha in Stage 1 & 2 and 60 house sites above the probable maximum flood; and
- (e) 9,815m² community facilities lot with associated road frontage above the probable maximum flood.

Residual Flood Risk/Safe Refuge

Residual flood risk refers to the flood risk associated with extreme flood events of greater magnitude than the defined flood event. Residual flood risk is required to be addressed to meet compliance with PO4 of the Flood hazard overlay code and PO24 of the *Maroochy North Shore local plan code* which states:

- PO4 Development does not compromise the safety of people resulting from the residual flood or storm tide inundation risk associated with events exceeding the DFE or DSTE, up to and including the probable maximum flood (PMF) or probable maximum storm tide (PMST).
- PO24 Development in the Emerging community zone provides for adequate flood immunity (including safe refuge) and emergency access arrangements while avoiding any adverse off-site flooding impacts.

With respect to the subject site, it becomes isolated during the defined flood event meaning that if people do not evacuate the site prior to flood levels reaching the height of the defined flood event, they are trapped on the site. This is a potentially dangerous situation if floodwaters continue to rise and there is no location on the site above the extreme event flood level, they could potentially be exposed to the flood hazard.

Through the assessment of the development application, the proposal has been modified and the number of dwellings (and therefore people) within the development has reduced. Due to ecology constraints, the multiple dwelling units around the wetland have been removed and the other multiple dwelling unit site is not supported (as noted in the Density section of this report). The total number of dwellings approved is 645, however, conditions are recommended in the event of approval, for provision of 60 dwellings above the probable maximum flood. The number of dwellings below the probable maximum flood level is therefore 585 which, on the basis of 2.5 people per dwelling, is equivalent to 1460 people. This is the at risk population during a probable maximum flood event.

A Flood Emergency Management Plan has been prepared by SLR Consulting for the applicant with a peer review undertaken for the applicant by Molino Stewart. A critical component of the Flood Emergency Management Plan is that it proposes to manage the residual flood hazard on the site through early evacuation of the site prior to access to the site becoming inundated by floodwaters.

Critically, the Flood Emergency Management Plan is reliant on the Sunshine Coast Local Disaster Coordination Centre (who includes representatives from Council, Queensland Police, Emergency Management Queensland, State Emergency Services and relevant State Government Departments) to implement the Plan and requires the Sunshine Coast Local Disaster Coordination Centre to monitoring weather forecast, warnings from the Bureau of Meteorology, river height gauges. Further, the Flood Emergency Management Plan relies on the Sunshine Coast Local Disaster Coordination Centre to coordinate evacuation of the site, open and operate the Twin Waters West Safe Refuge Building. There is considerable work involved in implementing the Flood Emergency Management Plan at a time when upstream communities are in the midst of a flood emergency and a significant population in the lower Maroochy River catchment who are already at flood risk need to be managed. Importantly, Council does not have any other community which is reliant on flood forecasting by the Bureau of Meteorology as a trigger for evacuation.

The strategy of "early evacuation" is suitable provided all of the following requirements are met:

- there is sufficient time to evacuate,
- there is somewhere for people to go,
- it does not burden emergency services,
- there is a failsafe backup plan in the event people do not evacuate for whatever reason, and
- it does not make the situation worse for existing communities.

There are significant risks associated with an evacuation strategy as detailed in the Flood Emergency Management Plan taken from *Handbook 7, Managing the Floodplain:* A Guide to Better Practice in Flood Risk management.

Many flood fatalities result from the interaction of people, often in vehicles, with floodwaters Humans are particularly vulnerable to drowning in floods. Other causes of fatalities include flood induced stress (potentially leading to cardiac failure), electrocution and problems resulting from a lack of essential medicines. In recent years, a high proportion of flood-related deaths in Australia have occurred on flooded roads. Fatalities also result from people being swept away while crossing rivers, stormwater channels, overland flow paths or other flooded areas. While evacuation can reduce the risk to life, the evacuation of elderly people can lead to an increase in mortality rate

It is important to note that Council does not have sufficient pre-planning for existing affected communities. For example, if a flood of the Maroochy River was to occur today and the Bureau of Meteorology were to issue a flood forecast of a 2.0m peak at Picnic Point, it does not automatically trigger any set response. The Sunshine Coast Local Disaster Coordination Centre has to assess what that means and decide on a course of action. The analysis undertaken by the applicant as part of the Flood Emergency Management Plan shows that the response should be evacuation of the Twin Waters, Pacific Paradise, Novatel Resort, Marcoola and Mudjimba communities.

Timeframes for evacuation of the Maroochy North Shore community are as follows:

- 1.5 hrs to review modelling from the Bureau of Meteorology
- 1.5 hrs for evacuation order to be made

- 8.2 hrs for all vehicles to evacuate
- 2 hrs traffic safety factor
- 1 hr warning acceptance factor
- 1 hr warning lag factor

Total time = 15.2 hrs, available time is 12 hrs

The analysis undertaken by SLR Consulting, and peer reviewed by Molino Stewart, came to a different conclusion due primarily to not understanding how the Sunshine Coast Local Disaster Coordination Centre operates. In the Flood Emergency Management Plan, no time has been allowed for the Sunshine Coast Local Disaster Coordination Centre to review the flood modelling from the Bureau of Meteorology and no time allowed for the Sunshine Coast Local Disaster Coordination Centre to make the evacuation order. These tasks have been estimated to take 1.5 hours each resulting in the total time taken to evacuate being greater than the available time. There is 4 hours of safety factors in the above analysis. However, it also shows that in a best case situation where everyday attempts to evacuate when told to do so, there may not be sufficient time for everybody to evacuate the area before floodwaters inundate the David Low Way.

Importantly, based on the above calculations, approving the development on an early evacuation strategy adds 2.14 hours to the time it will take for the Maroochy North Shore community to evacuate. Excluding the proposed development, the evacuation time for the Maroochy North Shore community is 13.2 hrs. With the added cars from Twin Waters West, it means 1,285 people from the Maroochy North Shore community would no longer reach safety if the proposed development is completely reliant on an early evacuation strategy. It is important to note that Mudjimba residents will likely also attempt to evacuate south along the David Low Way adding to the time required to evacuate the site.

The proposed development may provide an area of over 4ha above the probable maximum flood level. If residents from surrounding areas in other communities fail to evacuate before the David Low Way is cut by floodwaters, they could access the higher land within the development to be safe. Therefore, if existing Maroochy North Shore residents fail to evacuate early, the proposed development will provide a flood free area for them to shelter during the event.

A Safe Refuge Building is proposed onsite with a gross floor area of 1,500m² on a site area of approximately one hectare so people are not just confined to the 1,500m² building. Based on the Red Cross Guidelines

(https://www.redcross.org.au/getmedia/cdbdc563-84fc-4af8-aa65-61414f84b01c/2015-Preferrred-Sheltering-Practices-for-Emergency-Sheltering-in-Australia.pdf.aspx), an area of 5m² per person should be provided so this centre would cater for 300 people based on this standard. This represents approximately 20% of the at risk population on the site.

An overall layout and sleeping and sleeping capacity for the temporary phase of sheltering for all designated emergency shelters is to be included in local disaster management plans. Under immediate sheltering conditions, the reality is that during the threat, evacuees may only have approximately 1.2 square metres of space. Available space per person should reach 5 square metres as soon as possible after the threat has passed.

When allocating space within an emergency shelter, common spaces other than bedding space should be taken into account. This may include dining space, infant care space (breast-feeding and nappy changing area), social space and facilities such as a safe and contained play area for children, storage space and an area for support services including medical services. These critical spaces should be excluded from the calculations to determine the net useable floor area for bedding.

The area required under the Red Cross Guidelines for immediate sheltering is 1.2m² per person so based on this standard the centre would cater for a maximum of 1,250 people which represents just over 80% of the at risk population on the site.

Surveys which have been undertaken within Australia by Molino Stewart show that between 10% and 20% of people say they would not evacuate under any circumstances. However, only about 20% to 25% of people evacuate when they are told to do so. The majority (between 55% and 70%) will attempt to evacuate at some point, but not when they are told to do so. For a development such as that proposed, the proportion leaving evacuation until it is too late may be higher given it has such high flood immunity.

The capacity of the evacuation route has been calculated as already being exceeded given the available time to evacuate is less than the time required to evacuate. The development should not be putting additional vehicles on this evacuation route to the detriment of people in existing communities who face a higher flood risk. These people in existing communities with a higher flood risk must be given priority for use of the evacuation route. Based on this information, a worst case scenario would be that only 20% of the population choose to evacuate and 80% remain in place.

The key argument made by the applicant is that given it will be used in such a rare event and for people who chose not to evacuate, a lower standard of service per person is acceptable. It is important to highlight that although access to the development is cut during the defined flood event, all dwellings within the development will have floor levels at or above the 0.05% annual exceedance period (1 in 2,000 year annual recurrence interval) flood event. To put this into perspective, it is likely that the homes of residents, over the period that they live within the development, will never be flooded. In the very rare events which residents would need to access the Safe Refuge Building, it is only because they chose themselves not to evacuate when they had the chance. During an extreme flood event, preservation of life is the key requirement as opposed to people being comfortable.

The Flood Emergency Management Plan is not recommended to be referenced as part of the approval. Council is not bound to operate the development in accordance with the

Flood Emergency Management Plan, but is a document which has been used to assist in making a decision regarding whether the development could be supported.

The following staging is recommended for the delivery of the Safe Refuge Building with associated rationale.

Stage	Requirement	Rationale
Stage 1	over a third of the stage area	The majority of this stage is above the probable maximum flood so people can shelter on land and in houses above the probable maximum flood level.
Stage 2	with surface levels above the probable maximum flood. Performance bond for 800m²	A large area (over 9ha) is provided for people to shelter on above the probable maximum flood. This will allow people to survive an extreme flood event but will not provide shelter.
	called on to construct the 800m ² first stage of Safe Refuge Building if not delivered within 10 years of sealing the	The likelihood of an extreme flood occurring in the 10 year period following completion of the stage is very low so no Safe Refuge Building can be accepted for this interim period. This situation is not acceptable as a longer term solution so bonding is required so a Safe Refuge Building can be delivered for the residents if the developer does not deliver it.
At 260 th dwelling unit (the time of creation of the lot which has the ability to create the 260 th dwelling unit)	Building with minimum gross floor area of 800m ² delivered. Initial performance bond for	At the 260 th dwelling, there are 200 dwellings below the probable maximum flood with an estimated population of 500 people. An 800m ² Safe Refuge Building provides shelter at a rate of 2m ² per person assuming 20% evacuate offsite.
At 410 th dwelling unit (the time of creation of the lot which has the ability to create the 410 th dwelling unit)	Building delivered – minimum	At the 410 th dwelling, there are 350 dwellings below the probable maximum flood with an estimated population of 875 people. A 1,000m ² Safe Refuge Building provides shelter at a rate of 1.4m ² per person assuming 20% evacuate offsite.
At 560 th dwelling unit (the time of creation of the lot	an additional 500m ² Safe	There is a risk that if the final stage of the Safe Refuge Building is not delivered until

which has the ability to create the 560 th dwelling unit)	Building with total gross floor	development that the final stage of the Safe Refuge Building
	called on to construct a 500m ² Safe Refuge Building if final stage not delivered within 10	
	years of sealing the plan of survey for the lot which has the ability to create the 560 th dwelling unit.	
Final Stage	gross floor area of 1,500m ² provided.	At the 645 th dwelling, there are 585 dwellings below the probable maximum flood with an estimated population of 1,463 people. A 1,500m ² Safe
	performance bond for 500m ²	Refuge Building provides shelter at a rate of 1.28m ² per person assuming 20% evacuate offsite.

Constructed Water Body

A large brackish constructed waterbody is proposed with deep areas. The shape and depth of the waterbody are based on the dual purpose of the constructed waterbody to provide flood conveyance through the development and provide fill material to achieve the required flood immunity standards.

The *Maroochy North Shore local plan code* identifies a number of key assessment matters associated with this site. Specifically, the local plan code identifies the following performance outcomes:

- PO27 Development in the Emerging community zone provides for the waterway system to be established and operated in accordance with an approved lake management plan.
- PO28 Development in the Emerging community zone provides for the ongoing maintenance and management of any constructed waterbody and associated infrastructure, taking into account whole of life cycle costing and the provision of an ongoing funding source (i.e. sinking fund).

PO18 of the *Stormwater management code* states that constructed waterbodies which are proposed to be dedicated as public assets are avoided unless there is an overriding need in the public interest. The background to this policy position of Council is that constructed waterbodies require significant expenditure to maintain them in good condition and represent an additional cost to Council beyond the usual roads and associated infrastructure dedicated to Council as part of urban development, and Council's expenditure on constructed waterbodies can only be managed to an acceptable level on those which provide an overriding community benefit. The proposed waterbody has been assessed as not providing an overriding community benefit.

However, the hierarchy of the planning scheme is that local plans override the development codes. Therefore, the *Maroochy North Shore local plan code* overrides the *Stormwater management code*. PO27 and PO28 of the local plan code specifically anticipate a constructed waterbody will be dedicated to Council and that a sinking fund amount be provided to Council to cover costs associated with the maintenance of the constructed waterbody.

It was known through the flood modelling done as part of the planning scheme amendment that the flooding solution for the site was going to result in a constructed waterbody forming part of the development and it would be dedicated to Council. This is why the local plan anticipates this and seeks the sinking fund. The application has therefore been assessed to ensure that the constructed waterbody is of a high standard and all costs associated with maintaining the waterbody over the 80 year timeframe specified in the policy are covered by the sinking fund.

The constructed waterbody is proposed to operate as a perched water body with water quality maintained through a pumping system pumping water in at the northern end from the existing Twin Waters Lake and flows discharged to the south to Maroochy River.

Detailed analysis including analysis of water quality in the existing Twin Waters Lake and computer modelling has been completed by the applicant to predict the water quality within the constructed waterbody, the lake turnover time and potential for stratification. A Lake Management Plan and associated life cycle costing has been prepared which covers the lake design, lake tenure, lake uses, community, environmental and maintenance aspects of the waterbody. The lifecycle costing has been prepared based on costs associated with implementing the Lake Management Plan.

A sinking fund amount has been calculated based on Council's *Planning Scheme Policy for Development Works* and an Infrastructure Agreement (**Appendix B**) has been entered into to provide this fund such that there is no cost to Council to maintain the constructed waterbody over the 80 year timeframe stipulated in the policy. This sinking fund amount is designed to cover all Council costs associated with operating the waterbody in accordance with the Lake Management Plan over an 80 year timeframe.

The infrastructure agreement covers off on bonding of the constructed waterbody. Given the development will be undertaken in stages, Council needs certainty that the ultimate constructed waterbody will be delivered. In order to provide this certainty, a performance bond is required for construction of the constructed waterbody which will be reduced as the constructed waterbody is progressively constructed.

The delivery of the constructed waterbody is dealt with in the executed Infrastructure Agreement. To avoid confusion, conditions of approval reference the Infrastructure Agreement with the exception of the design criteria for the waterbody and water quality requirements which are recommended to be included as conditions.

The water quality criteria has been included as conditions of approval. The criteria is similar to that recommended by the applicant however includes some additional parameters such as iron and aluminium. These parameters are recommended to detect if there is any acid sulfate leachate occurring into the lake. With respect to water quality criteria for the completed waterbody, the conditions are drafted such that the water

quality criteria can be modified by the Lake Management and Maintenance Plan which is to be submitted as required by the Voluntary Infrastructure Agreement.

Stormwater Quantity

All stormwater discharge from the development is directed to the proposed constructed water body. The constructed water body subsequently discharges through a pipe connection directly to the Maroochy River. No detention is required for this discharge given the discharge is directly to tidal waters and it is floodwaters which cause peak flood levels at this site; not stormwater discharge.

Stormwater discharge from the Sunshine Motorway currently enters the site at the north western end of the proposed constructed waterbody. The constructed waterbody has a standing water level which is higher than the existing standing water level on this portion of the site. The proposal will therefore result in an increase in the standing water level within the stormwater drains of the Sunshine Motorway. The State Government are a concurrence agency for this application and have assessed the application and have issued conditions in the event of approval.

Stormwater Quality

All stormwater from the development is proposed to be treated to meet the post construction water quality design objectives prior to discharge to the proposed constructed water body. Water quality treatment primarily consists of at source bioretention devices within the road reserve with some end of line devices where levels permit. Typically end of line devices are not feasible because once the stormwater is in the pipe system there is insufficient level difference between the pipe outlet and the lake level / highest astronomical tide to provide an end of line bioretention basin. The at source devices have the added benefit of being climate change resilient in that the base of the at-source devices are much higher than end of line devices.

To address issues associated with many small devices in the road reserve, one way crossfall access place road types are proposed which results in the bioretention devices only being required on one side of the road, which allows for unobstructed pedestrian movement along the high side of the road.

Summary

The assessment of the application against the *Flood hazard overlay code*, the *Maroochy North Shore local plan code* and the *Stormwater management code* has determined that the development complies with, or can be conditioned to comply as follows:

- the submitted flood models from the applicant have been tested and peer reviewed against council's models and found to have good agreement;
- any increases in flooding on external properties is acceptable;
- the nature of flooding and how the development changes the flooding characteristics have been sufficiently demonstrated;
- the development has appropriately responded to flooding for the proposed lots with appropriate floor levels including 60 lots above probable maximum flood;
- flood storage capacity is not maintained but due to the flooding characteristics of the site, the flood storage in this circumstance is not critical;
- a flood emergency management plan has been provided with a safe refuge building being provided on the site of 1500 m² (for the ultimate development) to

- accommodate any person who does not evacuate the site in the event of a probable maximum flood; and
- a constructed waterbody is provided as per local plan code with an infrastructure agreement to cover council's costs to maintain the waterbody for an 80 year period.

Building Height

The Sunshine Coast Planning Scheme 2014 identifies a building height of 8.5 metres for the site. The applicant's variation to building height for this application relates to the medium density residential and community facility sites, which seek a 12 metre height limit. The Sunshine Motorway is also a designated Scenic Route in the Scenic amenity overlay code.

The proposed height of buildings for the development vary on the site from 8.5 metres with the medium density residential and community facility sites being 12 metres. With the exception of the proposed medium density residential site adjacent to the Sunshine Motorway, the 12 metre height limits are centrally located within the site with the 8.5 metre height limits located on the edges of the site. The mapping within the *Height of buildings and structures overlay code* in the planning scheme is intended to be replaced with the below map.

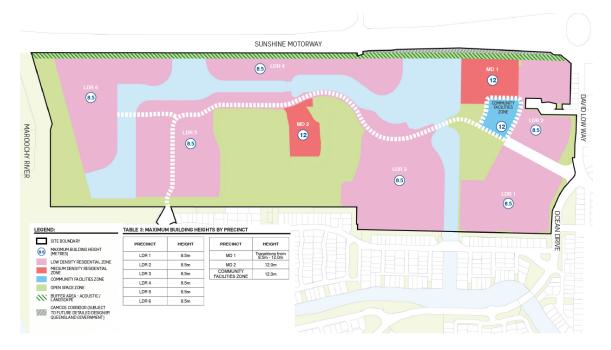


Figure 19 - Proposed Height Limits

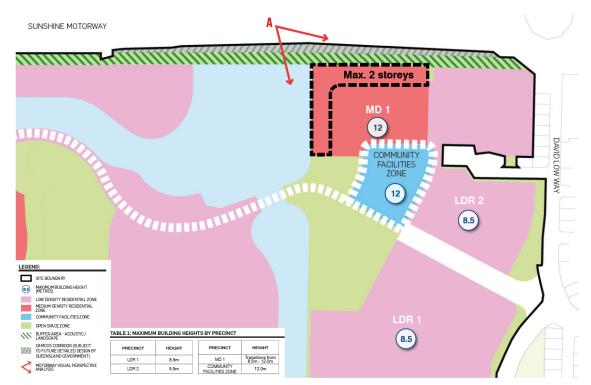


Figure 20 - Height Limit for Medium Density Residential site

When considering the submissions for the Planning Scheme Amendment, Council resolved to:

change the Height of buildings and structure overlay map OVM21H to include a Site Specific Note relating to the Twin Waters West land, which provides for a maximum height of 12 metres to be allowable in certain parts of the Emerging community zone (Twin Waters West), to accommodate multi-unit residential uses, where nominated on an approved plan of development.

However, this amendment could not be included as part of the package as the State Government considered these to be a significant change to the amendment.

As the development does not comply with the performance outcome of the *Height of buildings and structures overlay code*, an assessment must be made against the purpose and overall outcomes of this code. The purpose of the code is to:

"protect the distinctive character and amenity of the Sunshine Coast as a place with a predominantly low to medium-rise built form"

This purpose is supported by the following relevant overall outcomes:

- (a) development provides for the height of buildings and structures to comply with specified height limits except where explicitly provided for in this code;
- (b) development contributes to the retention of the preferred built form character for the Sunshine Coast, and the local plan area in which it occurs;
- (c) the height of buildings and structures is consistent with the reasonable expectations of the local community;

- (d) development on a site within a flooding and inundation area, as identified on a Flood Hazard Overlay Map, is afforded an allowance for additional maximum height so as to minimise the risk to people and property; and
- (e) development does not result in a significant loss of amenity for surrounding development, having regard to:-
 - (i) the extent and duration of any overshadowing;
 - (ii) privacy and overlooking impacts;
 - (iii) impacts upon views;
 - (iv) building character and appearance; and
 - (v) building massing and scale relative to its surroundings.

Generally, this requires consideration against the *Maroochy North Shore local plan code*, the impacts on views from Sunshine Motorway, consideration of the reasonable expectations of the local community and whether there is a significant loss of amenity for surrounding development.

Maroochy North Shore local plan code

Accordingly, the *Maroochy North Shore local plan code* identifies the following performance outcome

Development in the Emerging community zone provides for residential uses at a scale and intensity, and in a configuration that is consistent with and sympathetic to the established low density residential character of the adjoining Twin Waters residential community.

Development in the Emerging community zone maintains or improves the amenity of neighbouring premises having regard to:-

- (a) overshadowing;
- (b) privacy and overlooking;
- (c) building character and appearance; and
- (d) building massing and scale as seen from neighbouring premises.

These same matters are raised in the *Height of buildings and structure overlay code* and the *Scenic amenity overlay code*.

Reasonable expectations of the local community

The reasonable expectations of the local community are to be judged by reference to the current *Sunshine Coast Planning Scheme 2014* height of 8.5 metres.

It is relevant to consider the submissions received as part of the public notification stage. As discussed in greater detail below, a total of 417 submissions were received with 285 (or 68%) objecting to the proposal. However, only a small number of submissions included comments including a concern regarding the proposed height of the development.

With the exception of the multiple dwelling unit site on the western edge of the site, the 12 metre building height is located central to the site and a visual assessment has been

provided to determine whether the proposed height will not have an adverse impact on the existing surrounding residential area. This is considered below.

Amenity Impacts

The development is required to be assessed to determine whether it will result in a significant loss of amenity for surrounding development having regard to the following:

- · the extent and duration of any overshadowing;
- privacy and overlooking impacts;
- impacts upon views;
- · building character and appearance; and
- building massing and scale relative to its surroundings.

Any impacts regarding building character and appearance, overshadowing, overlooking, privacy and impacts on views from adjoining developments will be largely internalised given the size of the site and separation between the development and the existing Twin Waters development. The multiple dwelling unit site on the western side of the development may be visible from the Sunshine Motorway, identified as a Scenic Route.

The applicant submitted a Visual Impact Assessment and Photomontages in support of the development application.

In addition, the below photomontages of the proposal when viewed from key vantage points from this assessment, as prepared by Council, are provided below.



Figure 21 – View of proposed 12m height from the northern end of Sunshine Motorway looking south



Figure 22 – View of proposed 12m height from western side of Sunshine Motorway midway along Sunshine Motorway looking east to unit development



Figure 23 – View of proposed 12m height from southern side of Sunshine Motorway looking north

Council has reviewed this information and found that the buildings within the Community facilities zone are unlikely to protrude above the proposed vegetation on the Sunshine Motorway and as such, does not significantly interrupt any view lines as this is located further into the site. However, the 12 metre high unit development closer to the Sunshine Motorway is likely to be visible.

Summary

The assessment of the application against the *Height of buildings and structures overlay code* and the *Maroochy North Shore local plan code* has determined that the development complies with, or can be conditioned to comply as follows:

• The residential development maintains a height of 8.5 metres for dwellings.

 The proposed 12 metre height limit for the Community Facility site is centrally located, which will reduce opportunities of views to this building from outside the development.

On this basis, the proposed Building Heights Plan should be amended to allow for the Community facilities zoned site to retain the proposed 12 metre height limit, but all other parts of the site should remain at a building height of 8.5 metres. This map could be conditioned to replace the mapping within the *Height of buildings and structures overlay code* of the *Sunshine Coast Planning Scheme 2014*.

Density

The *Maroochy North Shore local plan code* identifies that residential densities in the Twin Waters West estate, in partial fulfilment of performance outcome PO22, are:

- (a) low density residential uses within the development to achieve:-
 - (i) a minimum lot size of 500m2; and
 - (ii) an average lot size of at least 700m2; and
- (b) limited Multi-unit residential uses which are focussed in discreet nodes with convenient access to public transport and active transport routes.

The associated performance outcome states:

Development in the Emerging community zone provides for residential uses at a scale and intensity, and in a configuration that is consistent with and sympathetic to the established low density residential character of the adjoining Twin Waters residential community.

It is important to note that when considering the planning scheme amendment, Council resolved to proceed with the proposed planning scheme amendment, with the following changes.

- reduce the minimum lot size from 500m2 to 400m2;
- limit the proportion of lots less than 500m2 to 12% of the total number of low density residential lots;;
- include a maximum density of 12 lots per hectare; and
- include a maximum density of 40 dwellings per hectare for multi-unit residential uses and comprising a maximum of 15% of the total developable area.

However, the above amendment could not be included as part of the final amendment package as the State Government considered these to be a significant change to the amendment.

As part of the scheme amendment process, Council was satisfied that these density provisions would reflect what exists in the adjoining Twin Waters Estate given these were

- reflective of the smallest lot of 403m² in the existing Twin Waters community;
- reflective of the proportion of lots less than 500m² in the existing Twin Waters community;
- generally consistent with the density of low density residential uses in the existing Twin Waters community; and

 consistent with the density range prescribed in the Multi-unit residential uses code of the planning scheme and generally consistent with the Explanatory Memorandum to the Sunshine Coast Planning Scheme 2014 (Major Amendment) No. 12 proportion of multi-unit residential uses in the existing Twin Waters community.

The applicant seeks to vary the density provisions to reflect the above council resolution being

- For low density residential uses within the development
 - (a) a minimum lot size of 400m2;
 - (b) the proportion of lots less than 500m2 are limited to 12% of the total number of low density residential lots; and
 - (c) a maximum density of 12 lots per hectare delivered across the entire site.
- For medium density residential uses in the development
 - (a) a maximum cumulative density of 40 dwellings per hectare for the two multiple dwelling unit sites.

Based on the above proposed densities, the application seeks the residential development outcome for the site to include:

- 584 residential lots within 6 precincts; and
- 2 multiple dwelling units sites (with an expected density of 180 dwellings over the two sites).

As noted in the report above, the central medium density site (containing 89 dwellings) is not recommended to proceed for ecological reasons, and is anticipated to be included as open space in the event of approval.

The proposal also includes a 2.7ha site in the northern end of the site, which is intended to accommodate 111 multiple dwellings at a density of 40 dwellings per hectare. The planning scheme identifies that limited multi-unit residential uses are intended to be focussed in discreet nodes with convenient access to public transport and active transport routes.

This is a large, concentrated multiple dwelling unit development, and is not considered to be located in discreet nodes. There are multiple dwelling unit developments within the Twin waters estate, but none as large as the one proposed. This medium density residential site is therefore not consistent with the scale, intensity and configuration of the Twin Waters estate. As such, this medium density site is recommended to be removed, and replaced by Low density residential zoned land (with the same Protected Housing Area Precinct as with the remainder of the Twin Waters West site).

The resultant residential development is 645 dwellings as noted in the Residual Flood Risk section of this report based on the safe refuge. Over the net developable area of 59.261 ha, the density of the development is 10.8 dwellings per hectare, complying with the planning scheme requirements.

Accordingly, the proposed changes to density for the low density residential precincts can be supported as the resultant development would be consistent with those in the adjoining Twin Waters Estate with

• a minimum lot size of 400m2;

- the proportion of lots less than 500m2 are limited to 12% of the total number of low density residential lots (77 lots); and
- a maximum density of 12 lots per hectare delivered across the entire site.

These matters can be conditioned in the event of approval.

Heritage and Character Areas

The subject site is of both Indigenous Cultural Heritage significance, and European Cultural heritage significance, with Settlers Park included as part of the *Heritage and character areas overlay* of the Planning Scheme.

The heritage matters have been addressed by the applicant, and assessment and outcomes are further outlined below.

Indigenous Heritage

Concerns were raised during the notification period regarding the level of engagement with the First Nations People (Kabi Kabi People).

In response to Council's Further Advice letter, the applicant confirmed that the site owner (Stockland) have had regular meetings with the local First Nations people to discuss an array of matters relating to ongoing projects in the Sunshine Coast region. Twin Waters West has been a point of discussion through these regular meetings and presentations since 2018. A series of informal meetings and discussions have been held during which the Twin Waters West project has been discussed.

A Cultural Heritage Management Agreement was executed by Stockland and Kabi Kabi representatives Archaeo Cultural Heritage Services, in August 2019. The objectives of this Cultural Heritage Management Agreement are to provide for the identification, protection and management of Cultural Heritage in the Project Area (Twin Waters West), including by undertaking the following:

- Implementation of the Management Recommendations contained in the Cultural Heritage Management Agreement; and
- Directly involving Kabi Kabi First Nation in the formulation and implementation of appropriate management strategies for Cultural Heritage as may be uncovered within the Project Area during development activities.

The Cultural Heritage Management Agreement also sets out matters such as:

- Principles of the Cultural Heritage Management;
- Cultural Heritage Duty of Care;
- Management Recommendations;
- Engagement of Kabi Kabi First Nations personnel; and
- Actions to be undertaken in the event Cultural Heritage is discovered during development activities.

European Heritage

The subject site includes two mapped sites of Heritage significance within the Heritage and Character areas overlay, Settlers' Park and the Blazed Tree.



Figure 24 - Sunshine Coast Planning Scheme 2014 - Heritage and Character areas overlay

The applicant submitted a Heritage Impact Statement as part of their application material, which was considered during assessment of the application. The statement demonstrates compliance with PO1 and PO2 of the *Heritage and Character areas overlay code*, through demonstrating that the proposed development is to be undertaken in accordance with the Australian ICOMOS Charter for Places of Cultural Heritage Significance (Burra Charter). Any impacts can be managed through conditions applied based on the recommendations from the Heritage Impact Statement.

There are specific provisions included in the *Maroochy North Shore local plan code* which relate to Settlers Park, to accommodate upgrading of the David Low Way/Ocean Drive intersection.

The relevant Performance outcome requires that:

PO30 Development in the Emerging community zone provides for the protection and enhancement of Settler's park as a recreation park, local heritage place and gateway entry feature for the Pacific Paradise and Twin Waters communities.

The proposed road infrastructure encroaches significantly on the existing local heritage place boundary for the site, and PO30 requires this be balanced by the following considerations.

The four mango trees on site are considered to be the principal elements of heritage significance, and conditions are applied in the event of approval to ensure protection Settlers Park mango trees, *Mangifera indica*, and requiring the existing hydraulic regime be maintained.

Conditions are also included to require the preservation of the existing shelter with tables and benches, interpretation panels and art installations within the current area of the park, as these relate directly to the heritage values of the site, in order to meet PO30 and ensure that the resulting amenity of the site will still be appropriate for use as a public park and for heritage conservation.

Although the key outcome is to retain the Mango trees as the items of heritage significance, in order to ensure no net loss in the size of the park area, additional functional park space has also been included in an alternate location on site. This is further detailed in Open Space section.

It is noted that the proposed development design for the broader Twin Waters West site also incorporates the preservation of the Blazed Tree Boundary Marker existing local heritage place. The ongoing preservation of this site is required and has been conditioned.

Access Movements

The *Maroochy North Shore local plan code* identifies a number of key pedestrian, cycle and road connections and movements critical for the development.

These relate to the road network, active transport networks, pedestrian connections and the coastal pathway as shown below.



Figure 25 – Maroochy North Shore local plan code mapping showing key connections (Sunshine Coast Planning Scheme 2014)

Road Network and Public Transport Routes

The *Maroochy North Shore local plan code* identifies the following performance outcomes relating to the road network:

- PO29 Development in the Emerging community zone provides for a legible and permeable local road network that provides for:-
 - (a) primary access to the site at the Ocean Drive/David Low Way intersection;
 - (b) local access to the site via the Stillwater Drive/Esperance Drive intersection and Godfreys Road; and
 - (c) other points of access as appropriate to distribute traffic and enhance local connectivity

- PO31 Development in the Emerging community zone provides for a subdivision layout and transport infrastructure to be designed, located and sequenced having specific regard to:-
 - (a) improving local connectivity;
 - (b) minimising adverse traffic impacts on existing residential areas; and
 - (c) reflecting the amenity and character of the adjoining Twin Waters residential community (including but not limited to the provision of generous verge widths).

The applicant has provided a proposed Road Network plan as shown below.

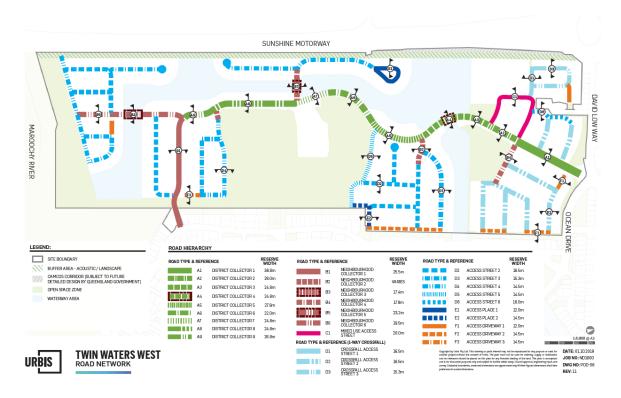


Figure 26 - Proposed Road Network Plan

Primary vehicle access is provided via a four-way intersection upgrade with the State-controlled David Low Way / Ocean Drive intersection, with the main site access street being the southern leg of the intersection. The applicant had proposed a multi-lane roundabout for this intersection. However, the State Government has provided conditions of approval requiring the four-way intersection be signalised to provide a safer and more efficient movement outcome for pedestrians and cyclists at this location.

A secondary, local street connection is proposed at the south-eastern part of the site to link with Stillwater Drive at the existing Esperance Drive roundabout. This promotes local connectivity and integration within the overall Twin Waters area and is consistent with the requirements of the *Maroochy North Shore local plan code*.

The proposed development does not provide a local road linkage from the south-western part of the site to Godfrey's Road, the potential for which has been identified in the local plan code. However, there appears little benefit in such a road connection since

vehicular access to / from the site is adequately provided via the already proposed street access points and there is not significant existing (or future) development to the west (on the other side of the motorway) that suggests a road connection in this area is needed for local connectivity and integration.

Potential for public transport access is created via allowance for a future bus route on the main access street through the development between David Low Way and Stillwater Drive. This allows for a bus 'loop' to be created through part of the existing Twin Waters area and the subject site. It is noted that such a bus 'loop' would require a significant diversion from existing through-running bus routes on David Low Way and therefore unlikely to be serviced in the short to medium term.

The verge widths provided are in accordance with the Transport and parking code. Within these verge widths, there is suitable space to accommodate a shaded boulevard within the central median strip, and also plantings on each side of the street network for the District Collector road entering and traversing the site to the Recreation Park area.

Various roadway sections show retaining walls in Council reserves, where batters may be more appropriate. These amendments are conditioned where feasible in the event of approval.

Along the eastern edge of the site, single lane laneways with occasional indented parking (F2 and F3) are proposed, which are intended to replicate those in the existing Twin Waters Estate to allow for increased landscaping. While not typically supported, there are grounds to support these single lane laneways for the Twin Waters West site on the basis that the *Maroochy North Shore local plan code* requires that transport infrastructure to reflect the character and amenity of the adjoining Twin Waters residential community.

On-street parking should be maximised, in particular in the vicinity of the main park and the community hub. Conditions are applied to maximise on street parking opportunities in the event of approval.

Further, there are subtle differences between the Twin Waters development to the east, where additional park areas were created (not in road reserve) to meet the required 10% open space requirements with vegetation largely retained in situ and regenerated, which is different to the Twin Waters West development where any street plantings are new.

This entry creates a similar feel to the Twin Waters development to the east with substantial plantings as shown in the cross section below.

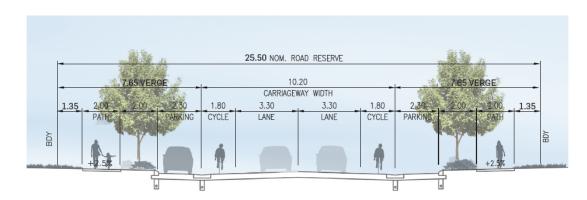


SECTION A1 - DISTRICT COLLECTOR 1 (36.8m) 1:100 @ A3

Figure 27 - Cross Section for the entry boulevard

As residents or visitors head south along the main entry road, the focus shifts heading south along the main entry road to the central area, which is intended to be dedicated to Council and the existing vegetation retained on the site.

The connection between Twin Waters and Twin Waters West provides a similar road reserve width (25 metres proposed, connecting to a 20 metre road reserve width within the Twin Waters development) and profiles with street trees rather than pocket parks as shown in the cross section below.



SECTION B1 - NEIGHBOURHOOD COLLECTOR 1 (25.5m) 1:100 @ A3

Figure 28 – Cross Section for Stillwater Drive connecting to Twin Waters

This ensures that the amenity and character of the adjoining Twin Waters residential community is maintained.

Pedestrian Connection and Coastal Pathway

The *Maroochy North Shore local plan code* identifies the following performance outcomes relating to the pedestrian and cycle network:

- PO32 Development in the Emerging community zone provides for a legible and permeable active transport network with a walkable waterfront along a significant portion of the waterway system and cycle and pedestrian links which connect with:-
 - (a) residential neighbourhoods to the east;
 - (b) the regional pedestrian and cycle path adjacent to the Sunshine Motorway; and
 - (c) the Maroochy River and foreshore.

PO33 Development in the Emerging community zone provides for an extension of the principal pedestrian and cycle linkage and the coastal path, as identified on Figure 7.2.18A (Maroochy North Shore local plan elements), which is designed to sensitively respond to site characteristics, protect ecologically important areas and enhance pedestrian and cycle connectivity.

The applicant has provided a proposed Pedestrian and Cycle Movement Plan as shown below.

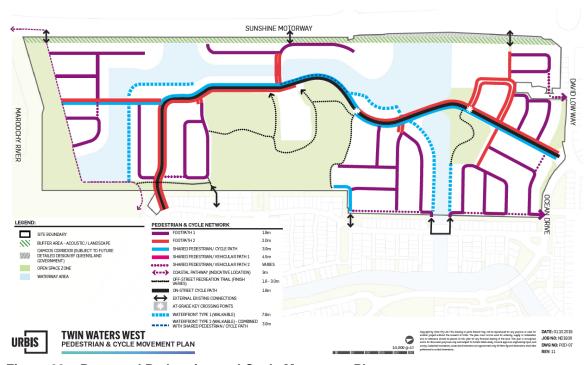


Figure 29 - Proposed Pedestrian and Cycle Movement Plan

Connectivity for pedestrians and cyclists is provided within and through the site via a network of pathways and on-road cycle lanes on the main access street through the site with the connections nominated in the local plan code.

The development provides walkable waterfronts for the majority of the lake frontage on the eastern side of the lake (with a small section that diverts to road based pathways) and connects the Twin Waters development to the central park area on the northern side of the lake. Whilst the development does not propose walkable waterfronts in the southern or western sections of the site, this is largely due to the minimal opportunities to connect to external pathway networks from the site.

The pathway network connects the development between the Twin Waters development and the Sunshine Motorway and David Low Way. The proposal also includes the coastal pathway along the southern edge of the site in accordance with the local plan code. This could be conditioned to be provided in the event of approval.

Overall, the development makes suitable provision for pedestrian, cyclist, public transport and car movement generally consistent with the requirements of the *Maroochy North Shore local plan code*, *Transport and parking code* and the *Planning scheme policy for the transport and parking code*.

Extractive Resources

A Key Resource Area (KRA No 150) is identified on the western side of the Sunshine Motorway extending across David Low Way, and covering the existing Maroochy River Golf Club. The resource is identified as:

Significant deposits of construction sand occur west of the Sunshine Coast Motorway west of Mudjimba on the floodplain of the Maroochy River. Large deposits of marine fine-grained silica sand overlie estuarine and marine muds and clay, in places covering possible fossil alluvial channels or tidal fine to coarse-grained silica sand. The deposit is significant and has the potential to supply a considerable portion of the Sunshine Coast demand, and is located close to developing urban markets in the northern and central part of the region.

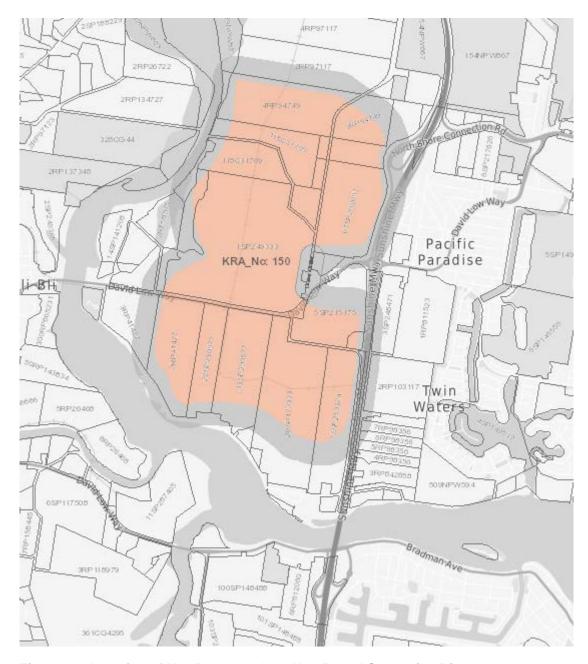


Figure 30 - Location of Key Resource Area No 150 and Separation Distance

A separation distance of 200m has been applied around the sand deposit. The identified transport route is along Finland Road to David Low Way then east to the Sunshine Motorway. The overlap is mapped is mapped below and affects the western edge of the subject site.

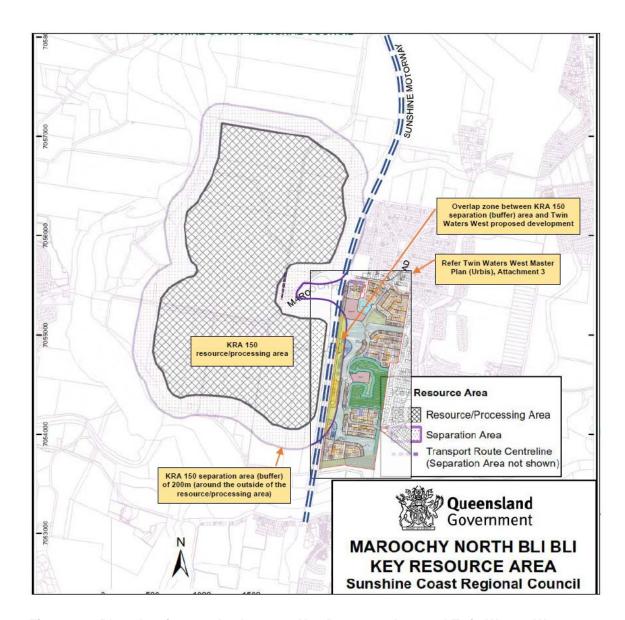


Figure 31 - Plan showing overlap between Key Resource Area and Twin Waters West development

The Extractive resources overlay code requires that development does not result in an increase in the scale or density of residential uses within an extractive resource separation area. Further, reconfiguring a lot within an extractive resource separation area should not result in the creation of additional lots used or capable of being used for residential purposes.

The associated performance criteria requires that:

- Development does not materially increase the number of people living in the extractive resource separation area; and
- Development minimises the potential adverse impacts (e.g. noise, dust, vibration and blasting) from existing or future extractive industry operations upon people working or congregating within the extractive resource separation area.

The purpose and overall outcomes of the *Extractive resources overlay code* requires that:

- development occurring within, adjacent or proximate to an extractive resource area does not adversely affect or impair the ability of existing or future extractive industries to viably win the resource; and
- development occurring within or adjacent to a transport route for extractive resources does not constrain or otherwise conflict with the ongoing safe and efficient transportation of the extractive resource.

The applicant provided an Extractive Industry Impact Assessment Report, which provides the following justification:

KRA 150 is an alluvial deposit of sand and its separation area is 200m. This is the standard buffer provision in KRA descriptions for sand deposits (in the absence of any particular mitigation measures or topographical features that would justify a lesser buffer distance to avoid 'reverse amenity' noise impacts from extractive industry).

The KRA 150 plan dates from 2013, where no acoustic barriers along the eastern side of the Sunshine Motorway were proposed. Given that for the 2019 proposed Twin Waters West development acoustic barriers for noise protection along the Sunshine Motorway are to be erected, the separation area of 200m can clearly be reduced without impacting on the future extraction viability of the KRA 150 sand deposit.

If approved in the future for extractive industry, the fine sand resources in the resource/processing area of KRA 150 would be excavated by both dry mining (by excavator above and up to several metres below the water table) and dredging thereafter below the water table to the base of the sand deposit.

Because the sand deposit is in the floodplain and has a high water table, dredging would be expected to dominate the extraction process. The working of the materials along the eastern extraction boundary of KRA 150 and adjacent to the Sunshine Motorway would typically be expected to take several years, leaving a lake or series of lakes behind depending on the depth of the excavated sand resource.

Dredging is not a significant noise emitter. Excavator and haul trucks used for the dry excavation of sand produce noise emissions. Dust is not typically a problem for moist or wet sand extraction and processing operations and so the principal emissions from the future extraction of KRA 150 along its eastern boundary with the Sunshine Motorway would be mainly noise from haul trucks carting the raw sand to the sand quarry's processing plant. The quarry would use water to suppress dust emissions from heavy vehicle movements on future internal haul roads, to prevent dust impacts to motorway traffic. Extraction would typically occur in 'campaigns' during daylight hours, over a period of perhaps several years.

A future sand pit excavation at its limits must be designed to produce a stable batter slope - for sand this is typically around 1V to 3H. The development of the floodplain for extractive industry would need to address flood impacts – typically this requires the restriction in the height of bunds, barriers and materials stored

above ground. These measures and requirements for contemporary sand extraction in floodplains mean that flood or stability (geotechnical) related issues are managed by the design of extractive operations, so as to avoid external impacts - as they are obligated to do so under development approval conditions and mine (quarry) safety and health legislation.

Given the particular circumstances and measures described in this report, there are no reasonable grounds to consider that the two land uses, separated by the Sunshine Motorway and CAMCOS corridor, cannot co-exist compatibly.

The acoustic barriers and landscaped buffer for the Twin Waters West development obviate the need for the separation area of KRA 150 to extend into it, because they fulfil the purpose and intent of the SPP and its Mineral and extractive guideline.

While the development does materially increase the number of people living in the extractive resource separation area, the purpose of the *Extractive resources overlay code* is to ensure that the ability to win the resource is not affected.

Given the proposed acoustic fence, and the method of extraction, it can be concluded that the proposed development would not prevent or interfere with the current or future viability of winning or processing of the extractive resource.

Bushfire

The site is affected by the Medium Bushfire Hazard Area and Buffer under the *Bushfire hazard overlay code* in the *Sunshine Coast Planning Scheme 2014*. This is confirmed in the State Government mapping, which shows the site as being affected by the High Potential Bushfire Intensity and Potential Impact Buffer areas.



Figure 32 – Bushfire Hazard overlay (Sunshine Coast Planning Scheme 2014 and State Planning Policy mapping

The State Planning Policy prevails to the extent of any inconsistency as the State Planning Policy has not been reflected in the *Sunshine Coast Planning Scheme* for bushfire matters. As the southern section of the site affected by the bushfire overlay is also affected by the Coastal Management District, the State Government are responsible, in their concurrence agency role, to address these matters. The concurrence agency response does not raise any specific concerns with bushfire matters.

As noted above, the central ecological important area is recommended to be for park purposes, and therefore, the buffer areas around the bushfire prone areas requires assessment.

The Bushfire Management Report addresses the interfaces between the central bushland reserve and adjoining dwellings by providing a continuous road interface to the

central wetland and no roads ending in cul-de-sacs. This allows adequate access for fire fighting vehicles and escape /evacuation for adjoining residents in the event of bushfire.

Airport Matters

The subject site is mapped within the Airport Environs overlay, being within 3km of the Sunshine Coast Airport. The site is located within the *OLS – Obstacle limitation surface boundary sub-category* and *Runway separation distance* subcategories of the overlay.

An assessment against the *Airport Environs Overlay code* was provided by the applicant in response to Council's Information request, and is detailed below.

OLS – Obstacle limitation surface boundary sub-category

The proposed development (maximum building height 12 metres) will not penetrate the obstacle limitation surface (OLS) of the airport, meeting Acceptable Outcome AO1.1 and therefore not impacting the functionality of the existing airport environment.

Runway separation distance

The application requirements assessment against the code due to the creation of a constructed waterbody within 3km of the Airport.

The submitted information confirms that the composition of vegetation throughout Twin Waters West will not create new sources that are known to be problematic to the airport environ (e.g., dense vegetation buffers around water bodies, planting of trees likely to form hollows, keeping waterways free of vegetation that might provide habitat or food sources for medium to large water birds).

The proposed planting palette for the development addresses the requirements of the *Planning scheme policy for the Airport Environs overlay code* by ensuring the avoidance of extensive planting of fruit trees, and the avoidance of the creation of large grassed areas capable of producing abundant seed, demonstrating compliance with AO2.5 of the code. This will be subject to further detailed assessment as part of future Operational Works applications.

Noise

There are no current or future ANEF contours affecting the site, therefore there are no requirements for the development to respond to Airport noise requirements. Australian Standards for construction will be applied as required for subsequent developments.



Figure 33 - Current planning scheme mapping and Future (2040) noise contours – expansion

There are no other applicable requirements of the Airport Environs overlay to the proposed development on the subject site.

Acid Sulfate Soils

The purpose of the *Acid sulfate soils overlay code* is to ensure that the generation or release of acid and metal contaminants from acid sulfate soils does not have adverse effects on the natural environment, built environment, infrastructure or human health.

This is intended to be achieved through the following:

- (a) development ensures that the release of acid and associated metal contaminants into the environment is avoided by either:-
 - (i) not disturbing acid sulfate soils when excavating or otherwise removing soil or sediment, extracting groundwater or filling land; or
 - (ii) treating and, if required, undertaking ongoing management of any disturbed acid sulfate soils and drainage waters.

The applicant provided an Acid Sulfate Soils investigation for the site. The recommendations of this report indicate:

- Earthworks should be appropriately staged and sequenced to limit the extent of disturbance to soils and groundwater so appropriate control measures can be taken;
- Lake construction will require the implementation of suitable groundwater monitoring program to monitor potential groundwater drawdown and changes in groundwater quality

- Neutralising all existing and potential acidity through addition of agricultural lime as per the Queensland Acid Sulfate Soil Technical Manual, Soil Management Guidelines; and
- During construction, all accumulated surface water and collected groundwater seepage to be controlled on site, monitored and treated where required to comply with the appropriate discharge criteria.

In the event of approval, conditions (including engineering certification) could be applied by the State as a referral agency for each stage of the development where acid sulfate soils will be disturbed to be endorsed through an operational works approval.

Acoustic Amenity

The applicant provided a noise impact assessment report to address compliance with the outcomes for the location and design of sensitive land uses to ensure that noise emissions from the Sunshine Motorway and David Low Way do not adversely affect the wellbeing of occupants i.e. by provision of noise barriers, house façade design and buffer setback to the roads as per PO7 of the *Regional Infrastructure overlay code* and PO39 of the *Maroochy North Shore local plan code*.

To minimise the impacts of transport noise on dwelling occupants, the Queensland Government has streamlined the building application approval process for accommodation buildings constructed in designated transport noise corridors.

The subject land is mapped as within a Transport Noise Corridor and the *QDC-MP4.4* Buildings in Transport Noise Corridors will apply in addition to the State Code 1: Development within a State Controlled Road Environment in regard to the State Road corridor associated with the Sunshine Motorway and the David Low Way.

The Noise Impact Assessment Report includes Figures E.4 and E.3 which designate the location of access ways within the acoustic noise barriers to the CAMCOS Corridor. An additional access way has been requested connecting the development to the regional pathway near Maroochy River Bridge.

At the time of operational works for each stage, the plans for civils/landscape can include the acoustic design for the barriers e.g. position, materials, height, returns and access way through the barriers whilst maintaining the acoustic rating. The acoustic design for the barriers have been conditioned by the State as a referral agency (includes engineering certification) against their design requirements and the recommendations of the approved Acoustic Impact Assessment Report. Council will liaise with the State in the event compliance action by the State to initiate enforcement is needed.

Property notes can be applied to require property owners, purchasers and building certifiers of specific lots, to apply the varied construction categories for dwellings against the *QDC-MP4.4 Buildings in Transport Noise Corridors* as a result of acoustic barriers to the Sunshine Motorway state road. As part of building applications for dwellings on the lots, with the varied construction categories, the private certifiers are directed to adopt the new categories determined by the approved *Acoustic Impact Assessment Report*.

Conclusion for Developable Area

The above assessment recommends the following changes to the development footprint:

- Amend the northern Medium density residential site to Low density residential (Protected Housing Area Precinct);
- Amend Recreation Park 2 to Low density residential (Protected Housing Area Precinct);
- Removal of the central Medium density residential site (MD2) and replace with Open space zone;
- The proposed height of buildings for the development are 8.5 metres with the exception of the community facility site being 12 metres;
- The resultant residential development is 645 dwellings with lot sizes being:
 - o a minimum lot size of 400m²;
 - the proportion of lots less than 500m² are limited to 12% of the total number of low density residential lots (77 lots); and
 - o a maximum density of 12 lots per hectare delivered across the entire site;

Land Uses and Categories of development and categories of assessment table

The Preliminary Approval, involving a variation request, includes the following components:

- Establish a zone plan, including the following zones
 - o Low density residential zone
 - o Medium density residential zone
 - o Community facilities zone
 - o Open space zone and
- Vary the levels of assessment for future development applications within each of these zones, overriding the Table of Assessment for the current Emerging community and Community facilities zoning under the Sunshine Coast Planning Scheme 2014;
- Vary the levels of assessment for Reconfiguring a Lot across the site
- Vary the levels of assessment for Operational Works (Advertising Devices) in the Sales Village area

The plan below shows the proposed precincts.

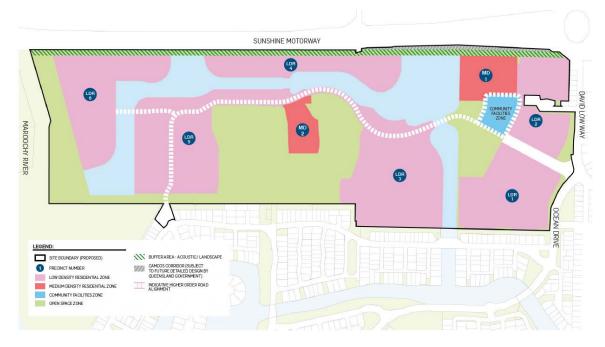


Figure 34 - Proposed Precincts

These variations are considered below for each zone.

Low Density Residential Zone

The Plan of Development identifies six Low density residential zones across the estate, and proposed an alternative Category of development and category of assessment table:

When assessed against the same table in the *Sunshine Coast Planning Scheme 2014* for the Low density residential zone, the following differences are noted:

- Uses added to Category of development and category of assessment:
 - Sales office (for 4 years in lieu of 2 years as per the Sales office code)
 - Parking Station
- Uses removed from Category of development and category of assessment that are either code assessable or accepted development:
 - Dual occupancy
 - Dwelling unit
 - Residential care facility (Impact assessable where in the LDR1 Protected Housing Area Precinct)
 - Retirement facility (Impact assessable where in the LDR1 Protected Housing Area Precinct)
 - Shop (where for a corner store)
 - Community care centre
 - Community use (only where on council owned land)
 - o Emergency services
 - Utility Installation (Impact assessable where not a local utility)

- Codes removed from being applicable codes for accepted and code assessment
 - Low density residential zone code
 - o Applicable local plan code

In regards to the uses added to the above table, the construction of the document for the Sales Office will not result in the desired outcome for the applicant given the table is attempting to alter the acceptable outcomes in the *Sales office code*. Where the use extends beyond 2 years, a code assessable application would be required given the development would not meet the acceptable outcomes. In any case, 2 years is a reasonable timeframe for a sales office to occur on the site (based on commencement of use), and could be applied for where required. This change would also allow prize homes to occur for 4 years, which is not desirable.

The Parking station is proposed to be accepted development where associated with the Sales office. However, this is already considered to be in effect as the parking station, although on a lot, is part of the sales office. As such, this is not required.

Emergency services (for an evacuation centre) may be required where the display village is to be used for a safe refuge (as discussed in the report below). Accordingly, this should be added as accepted development.

There are no impacts on removing the remaining uses identified above for the following reasons:

- The adjoining zoning is Low density residential, with the LDR1 Protected Housing Area Precinct where dual occupancies are not supported in the existing Twin Waters Estate through the Twin Waters Lend Lease Covenant and Plan of Development applying to the Twin Waters estate;
- Both retirement and residential care facility would be impact assessable in the Low density residential, with the LDR1 Protected Housing Area Precinct; and
- Council is not likely to own land in these zones, and there would be no effect to these changes.

For those uses that are accepted development, the *Maroochy North Shore local plan code* and *Low density residential zone code* have been considered and found to be compliant. Note that the zone is intended to include the Protected Housing Area Precinct, which requires impact assessment for dual occupancies and notes these as inconsistent uses, and are not intended to occur in the Twin Waters West estate.

Variation to Dwelling House Provisions

The applicant has requested different design provisions for dwelling houses. Currently, the Mandatory Parts 1.1 and 1.2 of the *Queensland Development Code* contain the sting standards previously incorporated in the standard Building Regulation for:

- MP 1.1 Design and siting standards for single detached housing on lots under 450m²
- MP 1.2 Design and siting standards for single detached housing on lots 450m² and over

The *Queensland Development Codes* MP 1.1 and 1.2 are 'default' standards that must be applied unless a local government's planning scheme contains 'alternative standards'.

If alternative standards are contained in a planning scheme, they must be applied instead of the *Queensland Development Code* requirements.

The Sunshine Coast Planning Scheme 2014 identifies as an Editor's note that for a Structure Plan, as varied by an approved master plan or an approved plan of development for a variation approval or reconfiguring a lot, may vary or specify alternative requirements for accepted development or performance outcomes and acceptable outcomes for assessable development for a dwelling house. In such cases, compliance with these alternative requirements for accepted development or performance outcomes and acceptable outcomes for assessable development will be deemed to represent compliance with the comparable provisions of the Dwelling house code

On this basis, the applicant seeks dwelling houses to include the following setback provisions to allow setbacks to be calculated to the wall, not the outermost projection:

- Front setback
 - o Garage 6 metres
 - o Dwelling 4.5m to the ground floor & 6.0m to the first storey
- Side setback (corner lots) 2.0m to the ground floor along secondary frontage
- Rear setback 1.5m to the ground floor & 2.0m to the first storey

When considering these variations, the below purpose and overall outcome of the *Maroochy North Shore local plan code* is relevant to ensure that

Development in the Emerging community zone (Twin Waters West) is integrated with the existing Twin Waters residential community and provides for the establishment of residential land uses that are sympathetic to, and in keeping with, the prevailing low density residential character of the area. Development incorporates large areas of public open space and focuses on connection to water as a key design and character element for the emerging residential community

Front Setback

The *Dwelling house code* in *Sunshine Coast Planning Scheme 2014* includes alternative provisions to the *Queensland Development Code* in Acceptable outcome AO2.1, AO2.2 and AO3 as follows:

- AO2.1 Where located on a lot in a residential zone, a garage, carport or shed:-
 - (a) is setback at least 6 metres from any road frontage;
 - (b) does not exceed a height of 3.6 metres; and
 - (c) has a total floor area that does not exceed 56m².
 - Note AO2.1(b) and (c) do not apply to a garage under the main roof of a dwelling house.
 - Note AO2.1(a) alternative provision to QDC.
- AO2.2 Where located on a lot in a residential zone, the total width of a garage door facing a street (and that is visible from the road frontage) does not exceed 6 metres within any one plane, with any additional garage door

being set back a further 1 metre from the street frontage to break up the apparent width of the garage facade.

- AO3 Where located in a residential zone, the dwelling house (other than a garage, carport or shed) is setback to any road frontage at least:-
 - (a) 4.5 metres for the ground storey; and
 - (b) 6 metres for any levels above the ground storey.

Note — AO3 alternative provision to QDC.

The proposed setbacks are consistent with the planning scheme, although these setbacks are measured from outermost projection, and not the wall as requested.

A review of the previous Twin Waters Lend Lease Covenant and Plan of Development applying to the Twin Waters estate required setbacks to be measured from the outermost projection.

To ensure consistency with this estate and based on the overall outcome of the *Maroochy North Shore local plan code*, there are no grounds to support a change, and the Planning Scheme and *Queensland Development Code* provisions should apply.

Side Setback (for corner lots)

The Sunshine Coast Planning Scheme 2014 includes alternate provisions to the Queensland Development Code for side setbacks for corner lots in Acceptable outcome AO3 as follows.

- AO3 Where located in a residential zone, the dwelling house (other than a garage, carport or shed) is setback to any road frontage at least:-
 - (a) 4.5 metres for the ground storey; and
 - (b) 6 metres for any levels above the ground storey.

Note — AO3 alternative provision to QDC.

The applicant seeks dwelling houses to include a setback, to be calculated to the wall, at 2.0m to the ground floor along secondary frontage.

The proposed setbacks are not consistent with the planning scheme, noting that the planning scheme setbacks are measured from outermost projection, and not the wall as requested.

A review of the previous Twin Waters Lend Lease Covenant and Plan of Development applying to the Twin Waters estate required setbacks to be measured from the outermost projection but did not stipulate the required setback for corner lots. Accordingly, the *Queensland Development Code* applied, and a review of other corner lot building approvals indicate a minimum of 4.5 metres was applied.

To ensure consistency across both estates and based on the overall outcome of the *Maroochy North Shore local plan code*, there are no grounds to support a change, and the Planning Scheme and *Queensland Development Code* provisions should apply.

Rear Setback

The Sunshine Coast Planning Scheme 2014 does not include alternate provisions to the Queensland Development Code for rear setbacks.

The Queensland Development Code requires

- for lots with a frontage over 15 metres:
 - o where the height of that part is 4.5m or less 1.5m
 - where the height of that part is greater than 4.5m but not more than 7.5m
 2m; and
 - where the height is greater that 7.5m 2m plus 0.5m for every 3m or part exceeding 7.5m
- for lots with a frontage under 15 metres, a sliding scale is used based on road frontage width and building height (less than 1.5 metres and 2 metres noted above for lots greater than 15 metres in width).

The *Queensland Development Code* identifies that this would achieve the performance outcome, which:

- (a) provide adequate daylight and ventilation to habitable rooms; and
- (b) allow adequate light and ventilation to habitable rooms of buildings on adjoining lots.
- (c) do not adversely impact on the amenity and privacy of residents on adjoining lots.

The applicant seeks dwelling houses to include a setback, to be calculated to the wall, at 1.5m to the ground floor and 2.0m to the first storey.

The proposed setbacks are generally consistent with the planning scheme, although these setbacks are measured from outermost projection, and not the wall as requested.

A review of the previous Twin Waters Lend Lease Covenant and Plan of Development applying to the Twin Waters estate required setbacks to be measured from the outermost projection and recommended setbacks of 7.5 metres, with an ability to reduce this to 4.5 metres (or 1.5 metres where nominated on the plan) where a landscaped open space free from pools, paving, outbuildings etc was provided.

To ensure consistency and based on the overall outcome of the *Maroochy North Shore local plan code*, there are no grounds to support a change, and the *Planning Scheme* and *Queensland Development Code* provisions should apply.

Noting the above, and in the event of approval, the Category of development and category of assessment should read as follows (with tracked changes noting additional statements in red and deletions by strikethrough):

TWIN WATERS WEST – LOW DENSITY RESIDENTIAL ZONE - PRECINCT LDR1 (PROTECTED HOUSING AREA) (LDR1 – LDR6) (as identified on the approved Zone Plan in the Twin Waters West Plan of Development)		
Defined Use	Category of development and category of assessment	Assessment benchmarks for assessable development and requirements for accepted development
Residential activitie	s	
Dwelling house	Accepted development	Dwelling house code, as varied by Section 7.1 of the approved Plan of Development
Business activities		
Home based business	Accepted development if:- (a) For a home office; or (b) Involving a home based child care service licensed under the Child Care Act 2002.	No requirements applicable
	Accepted development if for an activity other than a <i>high impact home based business activity</i> .	Home based business code
	Impact assessment if for a high impact home based business activity.	The planning scheme
Sales office	Accepted development where operating for no longer than 4 years	Sales office code
	Gode assessment where operating for longer than 4 years	 Sales office code
Community activities	es	
Park	Accepted development	 No requirements applicable
Parking station	Accepted development, where associated with a Sales Office located in the 'Proposed Display Village Extent' shown on the 'Zone Plan' in the Twin waters West Plan of Development	No requirements applicable
Emergency Services	Accepted development where for an Evacuation Centre for <i>safe refuge</i> .	No requirements applicable
	Impact assessment if not otherwise specified.	The planning scheme
Other defined uses		
All other uses defined in Schedule 1 (Definitions)	Impact assessment	The planning scheme
Undefined uses		
Any use not defined in Schedule 1 (Definitions)	Impact assessment	The planning scheme

Medium Density residential zone

The Plan of Development identifies two Medium density residential zones across the estate, and proposed an alternative Category of development and category of assessment table.

As noted above, both medium density sites have been recommended to be removed from the application and be contained in the Low density residential (Protected housing area) zone.

Should this recommendation not be accepted, the following comments are made on the proposed table of assessment.

When assessed against the same table in the *Sunshine Coast Planning Scheme 2014* for the Medium density residential zone, the following differences are noted:

- Uses added to Category of development and category of assessment:
 - Sales office (for 4 years in lieu of 2 years as per the Sales office code)
- Uses removed from Category of development and category of assessment that are either code assessable or accepted development:
 - Dual occupancy
 - Dwelling unit
 - o Relocatable home park
 - Rooming Accommodation
 - o Short term accommodation
 - Shop (where for a corner store)
 - o Community care centre
 - Community use (only where on council owned land)
 - Emergency services
 - Utility Installation (Impact assessable where not a local utility)
- Codes removed from being applicable codes for accepted and code assessment
 - Medium density residential zone code
 - o Applicable local plan code

As noted in the Low density residential zone, the construction of the document for the Sales Office will not result in the desired outcome for the applicant given the table is attempting to alter the acceptable outcomes in the *Sales office code*. Where the use extends beyond 2 years, a code assessable application would be required given the development would not meet the acceptable outcomes. In any case, 2 years is a reasonable timeframe for a sales office to occur on the site (based on commencement of use), and could be applied for where required.

Emergency services (for an evacuation centre) is unlikely to be required where used for multiple dwelling units. However, this still could remain as code assessable in this zone.

There are no impacts on removing the remaining uses identified above for the following reasons:

 Dual occupancies were not supported in the existing Twin Waters Estate through the Twin Waters Lend Lease Covenant and Plan of Development applying to the Twin Waters estate:

- Dwelling units, Relocatable home park, Short Term Accommodation and Rooming accommodation would not be consistent with the existing Twin Waters development; and
- Council is not likely to own land in these zones, and there would be no effect to these changes.

For code assessable uses, the *Maroochy North Shore local plan code* and *Medium density residential zone code* contain additional assessment matters that are useful for assessment to ensure compliance with the zone code, and should be retained. However, for accepted development uses, these have already been assessed against the local plan code and zone code and found to be compliant.

Should the proposed medium density residential zones be accepted, the Category of development and category of assessment would read as follows (with tracked changes noting additional statements in red and deletions by strikethrough):

TWIN WATERS WEST – MEDIUM DENSITY RESIDENTIAL ZONE (MD1 & MD2) (as identified on the approved Zone Plan in the Twin Waters West Plan of Development)		
Defined Use	Category of development and category of assessment	Assessment benchmarks for assessable development and requirements for accepted development
Residential activities	es	
Dwelling house	Accepted development	Dwelling house code, as varied by Section 7.1 of the approved Plan of Development
Multiple dwelling	Code assessment	 Medium density residential zone code Applicable local plan code Multi-unit residential uses code Prescribed other development codes
Residential care facility	Code assessment	 Medium density residential zone code Applicable local plan code Residential care facility and retirement code Prescribed other development codes
Retirement facility	Code assessment	 Medium density residential zone code Applicable local plan code Residential care facility and retirement code Prescribed other development codes
Business activities		
Home based business	Accepted development if:- (a) For a home office; or (b) Involving a home based child care service licensed under the Child Care Act 2002.	No requirements applicable
	Accepted development if for an activity other than a high impact home based business activity.	Home based business code

	Impact assessment if for a high impact home based business activity.	The planning scheme
Sales office	Accepted development where operating for no longer than 4 years	Sales office code
Other defined uses		
All other uses defined in Schedule 1 (Definitions)	Impact assessment	The planning scheme
Undefined uses		
Any use not defined in Schedule 1 (Definitions)	Impact assessment	The planning scheme

Community Facility zone

The Plan of Development identifies a Community facility zone within the estate. The Community facilities site is different to the typical Community facilities zone as it proposes a mix of commercial activities, typically found in a Local Centre, and Community activities. Uses in the Community facilities zone has been used as the baseline as the current land parcels included in the application include a Community facilities zoned site (with the annotation of place of worship) in the north western corner of the site.

When assessed against the same table in the *Sunshine Coast Planning Scheme 2014* for the Community facilities zone, the following differences are noted:

- Uses added to Category of development and category of assessment:
 - o Office
 - o Place of worship
- Uses changed from Category of development and category of assessment:
 - Food and drink outlet (Planning Scheme states Accepted development where located on council owned or controlled land, conducted in association with a community use on the same site and having a gross leasable floor area less than 100m²)
 - Health care services (Planning Scheme states Accepted development where located in an existing building and conducted in association with a hospital, residential care facility or retirement facility on the same site; and Code Assessment where not in an existing building and conducted in association with a hospital, residential care facility or retirement facility on the same site)
 - Shop (Planning Scheme states Accepted development where located on council owned or controlled land, conducted in association with a community use on the same site and having a gross leasable floor area less than 100m²)
 - Community care centre (Planning Scheme allows for Accepted development (subject to requirements) where in an existing building)
 - Educational Establishment (Planning Scheme states Code assessment)

- Indoor sport and recreation (Planning Scheme states Accepted development where in an existing building, conducted in association with a educational establishment or community use on the same site is for a dance studio, health and fitness training, indoor sport, martial arts or performance arts)
- Uses removed from Category of development and category of assessment that are either code assessable or accepted development:
 - o Caretaker's Residence
 - o Rooming Accommodation
 - Short term accommodation
 - Market
 - o Emergency services
 - o Club
 - o Outdoor sport and recreation
 - o Park
 - Environment facility
 - Parking station
 - o Utility Installation (Impact assessable where not a local utility)
- Codes removed from being applicable codes for accepted and code assessment
 - Community facilities zone code
 - o Applicable local plan code

These activities are assessed below.

Commercial Activities

The Planning Scheme does not anticipate commercial uses on the sites zoned Emerging community. However, the application includes 6 De Vere Road, Pacific Paradise, which obtained an approval (Council reference MCU03/0212) for a Material Change of Use of Premises (Church, Community Meeting Hall, Child Care Centre, Outdoor Recreation & Indoor Recreation). This approval lapsed on 25 August 2019.

Within the Community Facility site, the Master Plan anticipates the following overall development within the Twin Waters West area:

- 781 dwellings, comprising 582 detached dwellings and 197 attached dwellings;
- Place of worship, including 562 m² auditorium and 316 m² of church administration:
- Long day care centre: 597 m²;
- Gym: 247 m²; and
- Retail floor space: 691 m².

This site is zoned Community Facilities, with a Place of Worship designation. A Place of Worship, Child Care Centre, Educational Establishment, and Community Use would be code assessable uses under the current *Sunshine Coast Planning Scheme 2014*.

The performance outcome PO22 states:

Development in the Emerging community zone provides for residential uses at a scale and intensity, and in a configuration that is consistent with and sympathetic

to the established low density residential character of the adjoining Twin Waters residential community.

The overall outcomes of the Maroochy North Shore local plan code identifies that

Development in the Emerging community zone (Twin Waters West) is integrated with the existing Twin Waters residential community and provides for the establishment of residential land uses that are sympathetic to, and in keeping with, the prevailing low density residential character of the area. Development incorporates large areas of public open space and focuses on connection to water as a key design and character element for the emerging residential community

The applicant provided an Economic Impact Assessment in accordance with the current Sunshine Coast Planning Scheme 2014 to determine the impact of the centre on existing commercial centres within the locality. Council sought external advice on the matters who concludes that:

- demand for the proposed retail component of the development at the subject site
 does not manifest prior to 2026, as prior to this time period the development is
 reliant primarily on trade from the secondary trade area;
- there will be some demand for additional long day care places at the subject site by 2024, with approximately 60 long day care places supportable by 2026 and increasing to 80 long day care places in 2029; and
- there is limited demand for another gym within the main trade area in the short to medium term.

Council's external economic expert is of the opinion that the proposed development is unlikely to have unacceptable impacts on the centres network and hierarchy based on the following:

The primary trade area will ultimately have 1,900 persons, suggesting it would generate demand for 4,180m² of supermarket floor space, based on an average retail floor space per capita of 2.2m² per person. Local centres typically meet 15% - 20% of total retail demand, which translates to 627m² to 836m² of retail floor space. Of that Local Centre floor space demand, it would be reasonable to assume about 70%-80% would flow to the subject site, inferring demand of 440m² to 670m², depending on choice of assumption. It would be reasonable to suggest that the proposed development would have some sort of a secondary trade area, hence the proposition of up to 700m² of supermarket floor space appears reasonable.

Given the economic assessment identifies that retail uses could occupy up to 700m², other commercial uses, such as an Office or Health care services uses proposed, could also occupy tenancies within the Community facilities zone. On this basis, it is reasonable to give some allowance for the commercial uses to be limited to a maximum cumulative gross floor area of 1,000m² for the commercial uses including Food and drink outlet, Health care services, Office and Shop uses. This allows for a combination of these uses on the site (a small café, physiotherapist, real estate office etc.) to occur to provide immediate local services to the Twin Waters West residents, with a small secondary catchment outside of the area.

Noting that the development is likely to be staged, the centre is unlikely to be provided before 2024 based on timing for future approvals (such as operational works and material change of use applications post creation of the lots), and construction of the development. As such, the proposed land uses on the Community Facility site are not anticipated to affect other nearby centres in the Maroochy North Shore local area, with the exception of the gym, which can be conditioned to be removed in the event of approval.

In regards to the proposed Indoor sport and recreation (gym), this use is not supported by the economic assessment. However, should the place of worship elect to rent their building, outside of their operating hours, for indoor sport and recreation purposes, such as dance studio, health and fitness training, indoor sport, martial arts; or performance arts, this is accepted development in the Community facilities zone.

In summary, the Category of development and category of assessment table should be amended to reflect the following outcomes:

- indoor sport and recreation (gym) not being able to occur in the Community facilities zone;
- the retail on the site being limited to a maximum cumulative gross floor area of 1,000m² for retail uses including Food and drink outlet, Health care services, Office and Shop uses;
- any single tenancy for a Food and drink outlet having a gross floor area not exceeding 100m²
- all other retail uses being contained in a single retail tenancy having a gross floor area not exceeding 300m²; and
- the child care centre being limited to a maximum of 80 long day care places.

Community Activities

The Category of development and category of assessment removes a number of residential, commercial and community activities, which are typically code assessable in the Community facilities zone as noted above.

- o Caretaker's Residence
- Rooming Accommodation
- o Short term accommodation
- Market
- Emergency services
- o Club
- Outdoor sport and recreation
- o Park
- Environment facility
- Parking station
- Utility Installation (Impact assessable where not a local utility)

There are no impacts on removing the below uses for the following reasons:

 Caretaker's residence, Short term accommodation and Rooming accommodation would not be consistent with the existing Twin Waters development;

- Clubs, including a club house, guide or scout club, bowls club etc, are unlikely to establish on this land and would not be preferred on this site;
- Outdoor sport and recreation is unlikely to occur on the site due to the presence of other buildings and associated car parking; and
- Council is not likely to own land in this location, and there would be no effect to these changes for Park, Environment facility, Parking station or Utility installation.

A Market is accepted development if:-

- (a) conducted by a not-for-profit organisation;
- (b) not on Council owned or controlled land; and
- (c) conducted in association with and subordinate to an educational establishment or community use on the same site.

Should the Place of Worship elect to undertake a market, it is appropriate that they are afforded that opportunity (as for their current site) subject to assessment against the *Market code*.

Emergency services (for an evacuation centre) is required to be provided on this site, and should be Accepted development (without requirements) in this zone.

The Category of development and category of assessment changes a number of uses, as noted above, including

- Community care centre
- o Educational Establishment

There are no impacts on changing the level of assessment for these uses for the following reasons:

- Community care centre could be established on the site subject to code assessment; and
- Larger Educational establishments would not be consistent with the existing Twin Waters development.

In regards to the removal of the *Maroochy North Shore local plan code* and *Community facilities zone code* for code assessable uses, these contain additional assessment matters that should be retained for assessment to ensure compliance with the intent of the planning scheme. For any accepted development uses, these have already been assessed against the local plan code and zone code and found to be compliant and can be removed.

Noting the above, and in the event of approval, the Category of development and category of assessment should read as follows (with tracked changes noting additional statements in red and deletions by strikethrough):

TWIN WATERS WEST – COMMUNITY FACILITIES ZONE (as identified on the approved Zone Plan in the Twin Waters West Plan of Development)		
Defined Use	Category of development and category of assessment	Assessment benchmarks for assessable development and requirements for accepted development
Business activities		
Food and drink outlet	Accepted development if:- (a) in an existing building; (b) any single tenancy having a gross leasable floor area not exceeding 100m²; (c) a maximum cumulative gross leasable floor area of 1,000m² for the Food and drink outlet, Health care services, Office and Shop uses; (d) not incorporating a drivethrough facility; and (e) not for a high volume convenience restaurant.	Transport and parking code
	Code assessment if:- (a) any single tenancy having a gross leasable floor area not exceeding 100m²; (b) a maximum cumulative gross leasable floor area of 1,000m² for the Food and drink outlet, Health care services, Office and Shop uses; (c) not incorporating a drivethrough facility; and (d) not for a high volume convenience restaurant.	 Community facilities zone code Applicable local plan code Business uses and centre design code, in conjunction with Section 9 of the Twin Waters West Plan of Development Prescribed other development codes
	Impact assessment if not otherwise specified.	The planning scheme
Health care services	Accepted development if:- (a) in an existing building; (b) any single tenancy having a gross leasable floor area not exceeding 300m²; and (c) a maximum cumulative gross leasable floor area of 1,000m² for the Food and drink outlet, Health care services, Office and Shop uses;	Transport and parking code
	Code assessment if not otherwise specified where:- (a) any single tenancy having a gross leasable floor area not exceeding 300m²; and (b) a maximum cumulative gross leasable floor area of 1,000m² for the Food and drink outlet, Health care services, Office and Shop uses.	 Community facilities zone code Applicable local plan code Business uses and centre design code, in conjunction with Section 9 of the Twin Waters West Plan of Development Prescribed other development codes

	Impact assessment if not otherwise specified.	The planning scheme
Office	Accepted development if:- (a) in an existing building; (b) any single tenancy having a gross leasable floor area not exceeding 300m²; and (c) a maximum cumulative gross leasable floor area of 1,000m² for the Food and drink outlet, Health care services, Office and Shop uses.	Transport and parking code
	Code assessment if not otherwise specified where:- (a) any single tenancy having a gross leasable floor area not exceeding 300m²; and (b) a maximum cumulative gross floor area of 1,000m² for the Food and drink outlet, Health care services, Office and Shop uses.	 Community facilities zone code Applicable local plan code Business uses and centre design code, in conjunction with Section 9 of the Twin Waters West Plan of Development Prescribed other development codes
	Impact assessment if not otherwise specified.	The planning scheme
Shop	Accepted development if:- (a) in an existing building; (b) any single tenancy having a gross leasable floor area not exceeding 300m²; and (c) a maximum cumulative gross leasable floor area of 1,000m² for the Food and drink outlet, Health care services, Office and Shop uses.	Transport and parking code
	Code assessment if where:- (a) any single tenancy having a gross leasable floor area not exceeding 300m²; and (b) a maximum cumulative gross leasable floor area of 1,000m² for the Food and drink outlet, Health care services, Office and Shop uses.	 Community facilities zone code Applicable local plan code Business uses and centre design code, in conjunction with Section 9 of the Twin Waters West Plan of Development Prescribed other development codes
	Impact assessment if not otherwise specified.	The planning scheme
Community activities		
Child care centre	Code assessment where not exceeding 80 long day care places.	 Community facilities zone code Applicable local plan code Child care centre code Prescribed other development codes
	Impact assessment if not otherwise specified.	The planning scheme
Community use	Accepted development if undertaken by or on behalf of Council.	No requirements applicable

	Accepted development if in an existing building.	Transport and parking code
	Code assessment if not otherwise specified.	 Community facilities zone code Applicable local plan code Community activities code, in conjunction with Section 9 of the Twin Waters West Plan of Development Prescribed other development codes
Educational establishment	Accepted development if in an existing building	Transport and parking code
	Code assessment if not otherwise specified	 Community facilities zone code Applicable local plan code Community activities code, in conjunction with Section 9 of the Twin Waters West Plan of Development Prescribed other development codes
Emergency services	Accepted development	No requirements applicable
Place of worship	Code assessment	 Community facilities zone code Applicable local plan code Community activities code, in conjunction with Section 9 of the Twin Waters West Plan of
		Development Prescribed other development codes
Sport and recreation	activities	
Indoor sport & recreation	(a) in an existing building (b) conducted in association with and subordinate to an educational establishment or community use on the same site; and (c) involving any of the following:- (i) dance studio; (ii) health and fitness training; (iii) indoor sport; (iv) martial arts; or (v) performance arts.	Transport and parking code
	Code assessment if not otherwise specified	 Business uses and centre design code, in conjunction with Section 9 of the Twin Waters West Plan of Development Sport and recreation uses code Prescribed other development codes
	Impact assessment if not otherwise specified.	The planning scheme

Other defined uses		
All other uses defined in Schedule 1 (Definitions)	Impact assessment	The planning scheme
Undefined uses		
Any use not defined in Schedule 1 (Definitions)	Impact assessment	The planning scheme

Open Space zone

The Plan of Development identifies an Open Space zone within the estate, and proposed an alternative Category of development and category of assessment table.

When assessed against the same table in the *Sunshine Coast Planning Scheme 2014* for the Open space zone, the following differences are noted:

- Uses added to Category of development and category of assessment:
 - Sales office
- Uses changed from Category of development and category of assessment:
 - Food and drink outlet (Accepted development where located on council owned or controlled land, conducted in association with an open space use on the same site and having a gross floor area of 300m² in lieu of 100m²)
- Uses removed from Category of development and category of assessment that are either code assessable or accepted development:
 - Caretaker's Residence (Code Assessment)
 - Market (Accepted development where located on council owned or controlled land and conducted by a not for profit organisation)
 - Community use (Accepted development where located on council owned or controlled land and undertaken by or on behalf of council)
 - Emergency services (Code assessment)
 - Outdoor sport and recreation (Code assessment where located on council owned or controlled land and undertaken by or on behalf of council or a not for profit community organisation)
 - Environment Facility (Accepted development where located on council owned or controlled land and undertaken by or on behalf of council)
 - Utility Installation (Impact assessment where not a local utility)
- Codes removed from being applicable codes for accepted and code assessment
 - o Open space zone code
 - o Applicable local plan code

The Category of development and category of assessment table includes Sales office (without gross floor area limitation) and Food and drink outlet (with a gross *leasable* area limitation of 300m²).

The Open space zone typically allows for a small Food and drink outlet up to 100m², particularly where located adjoining a park with additional park and playground

infrastructure. It has been accepted practice in other areas that a park can accommodate the sale office and food and drink outlet area to serve the catchment coming to the park. However, in this circumstance, the *Sales office code* does not provide any limitation of gross floor area.

To allow for an easier transition for any building to be converted to Food and drink outlet, it is recommended that the Category of development and category of assessment table be amended to reflect a gross leasable floor area of 100m² to be shared between the two uses for Recreation Park 1.

Recreation Park 1 will be served by car parking and public toilets, allowing for the Sales office use to be provided as an interim measure until the estate is sold.

To provide consistency between the *Sunshine Coast Planning Scheme 2014* and the Category of development and category of assessment table, it is recommended that the Category of development and category of assessment table aligns to the current *Sunshine Coast Planning Scheme 2014* and retain the uses to reflect the planning scheme requirements.

For code assessable uses, the *Maroochy North Shore local plan code* and *Open space zone code* contain additional assessment matters (such as the assessment of Markets on private land or Outdoor Sport and Recreation uses) that are useful for assessment to ensure compliance with the zone code, and should be retained. However, for accepted development uses, these have already been assessed against the local plan code and zone code and found to be compliant.

Noting the above, and in the event of approval, the Category of development and category of assessment should read as follows (with tracked changes noting additional statements in red and deletions by strikethrough):

TWIN WATERS WEST – OPEN SPACE PRECINCT (as identified in the Twin Waters West Plan of Development on the approved Zone Plan)		
Defined Use	Category of development and category of assessment	Assessment benchmarks for assessable development and requirements for accepted development
Business activities		
Sales office	Accepted development where:- located in the 'Proposed Display Village Extent' shown on the 'Zone Plan' in the Twin Waters West Plan of Development (a) a maximum cumulative gross leasable floor area of 100m² for the Sales office and Food and drink outlet uses; and (b) located within Recreation Park 1.	Sales office code
	Impact assessment if not otherwise specified.	The planning scheme
Food and drink outlet	Gode assessment if having a gross leasable floor area not exceeding 300m ² and located	Business uses and centre design code Prescribed other development codes

	I w	
	within Recreation Park 1 Accepted development if:-	Transport and parking code
	(a) located on Council owned or controlled land OR located within	
	Recreation Park 1;	
	(b) conducted in association with an open space use on the same site; and (c) having a gross leasable	
	floor area not exceeding 100m ² .	
	Impact assessment if not otherwise specified.	The planning scheme
Market	Accepted development if:-	No requirements applicable
	(a) conducted by a not for- profit organisation; and	
	(b) located on Council owned or controlled land.	
	Code assessment if not otherwise	Open space zone code
	specified.	Applicable local plan code
		Market code
		Safety and security code
		Transport and parking code
		Waste management code
Community activities	es	
Community use	Accepted development if:-	No requirements applicable
•	(a) located on Council owned or controlled land; and	
	(b) undertaken by or on behalf of the Council.	
	Impact assessment if not otherwise specified.	The planning scheme
Emergency	Code assessment	 Open space zone code
services		 Applicable local plan code
		 Community activities code
		Prescribed other development codes
Sport and recreation	n activities	
Outdoor sport and	Code development if:-	Open space zone code
recreation	(a) located on Council owned	Applicable local plan code
	or controlled land; and	 Sport and recreation uses code
	(b) undertaken by or on	Prescribed other development codes
	behalf of the Council or a not-for profit community organisation.	
	Impact assessment if not otherwise specified.	The planning scheme
Park	Accepted development	No requirements applicable
Other activities		
Environment	Accepted development if:-	No requirements applicable
facility	(a) located on Council owned or controlled land; and	To requirement applicable
	1	

	(b) undertaken by or on behalf of the Council.	
	Impact assessment if not otherwise specified.	The planning scheme
Utility installation	Accepted development if for a local utility.	No requirements applicable
	Impact assessment if not otherwise specified.	The planning scheme
Other defined uses		
All other uses defined in Schedule 1 (Definitions)	Impact assessment	The planning scheme
Undefined uses		
Any use not defined in Schedule 1 (Definitions)	Impact assessment	The planning scheme

Category of development and category of assessment table for Reconfiguring a lot

An alternative Category of development and category of assessment table is proposed for future reconfiguring a lot applications.

As noted in the Density section of this report, the resultant residential development is intended to be a maximum of 645 dwellings with lot sizes being:

- o a minimum lot size of 400m2;
- the proportion of lots less than 500m2 are limited to 12% of the total number of low density residential lots (77 lots); and
- o a maximum density of 12 lots per hectare delivered across the entire site;

For any future applications to be code assessable, the Category of development and category of assessment table should reflect the above. The applicable local plan code, zone code and development codes should apply.

No Medium density residential is recommended to occur on the site, and as such, should be deleted from the table.

There are no further considerations for the Community facilities zone to be code assessable. It is likely that this lot could be subdivided for management lots. The applicable local plan code, zone code and development codes should apply.

On this basis, the Category of development and category of assessment table is recommended to read as follows (with tracked changes noting additional statements in red and deletions by strikethrough):

Zone as identified on the approved Zone Plan	Category of development and category of assessment	Assessment benchmarks for assessable and requirements for accepted development
Low density residential zone	Code assessment where:- (a) All resulting lots are 400m² or greater; (b) Not more than 77 lots have a lot size between 400 m² and 500 m²; and (c) Complying with the residential density provisions nominated in Section 8.1 of the Twin Waters West Plan of Development-Not more than 645 residential lots are created.	 Reconfiguring a lot code, as varied by section 8.1 of the Twin Waters West Plan of Development Applicable local plan code Low density residential zone code Reconfiguring a lot code; and Prescribed other development codes. The planning scheme
Medium density residential zone	specified. Code assessment where:- (a) limited to MD Precincts 1 & 2; and (b) complying with the minimum lot size and density provisions prescribed for the Low density residential Zone in Section 8.1 of the Twin Waters West Plan of Development	Reconfiguring a lot code, as varied by Section 8.1 of the Twin Waters West Plan of Development
	Code assessment where involving the subdivision of an existing or approved building or structure that subdivides land and/or airspace	
Community facility zone	Code assessment n the 'Zoning Plan' in the Twin Waters West Plan	 Applicable local plan code Community facilities zone code Reconfiguring a lot code; and Prescribed other development codes.

Category of development and category of assessment table for Operational Works (Advertising Devices)

An alternative Category of development and category of assessment table is proposed for operational works (for advertising devices).

The Planning Scheme currently identifies that ground signs, boundary fence signs and flagpole signs are accepted development, subject to assessment against the *Advertising devices code*. Therefore, no change is proposed to the current planning scheme for these sign types.

Where directly associated with a Sales office (as part of a combined Display Village), pylon signs are often placed on the site for a temporary period, and removed upon cessation of the use. If the site is not operating as a Sales office, any signage would be considered third party advertising, and would require an impact assessable application. Further, the Planning Scheme already provides limitations regarding the number and sizes of signage for these uses, including:

- The total signface for all signs on a site to be the greater of either
 - For street front boundary length 0.75m² of signface area per linear metre of street front boundary length; OR
 - For street facing building width
 - For a single storey building—0.75m² of signface area per linear metre of street facing building width; or
 - For a two or more storey building— 1.0m² of signface area per linear metre of street facing building width;
- Freestanding signs (being ground signs and pylon signs) to be a combined maximum of 10m² and there are not more than two freestanding signs are erected on a site; and
- Pylon signs are setback 3 metres from the boundary, cannot project beyond the front boundary of the site, mounted as a freestanding structure in a landscape environment and has a maximum thickness not exceeding 75mm per metre of height above ground level

Where meeting these criteria, pylon signs could be accepted development where associated with a Sales office forming part of a Display Village.

Prize homes are also defined as Sales office, and these provisions are not intended to apply to those examples in residential areas for isolated prize home sites.

This Category of development and category of assessment table is intended to cover all of the Twin Waters West Estate, and limits the consideration of signage just to the Low density residential zone and excludes other zones.

On this basis, the Category of development and category of assessment table is recommended to replicate the Planning Scheme, with an additional clause for pylon signs associated with Sales office (forming part of a Display Village) and read as follows (with tracked changes noting additional statements in red and deletions by strikethrough)::

Zone ² Development	Category of development and category of assessment	Assessment benchmarks for assessable and requirements for accepted development
Low Density Residential Zone	Accepted development if:- (a) one or more of the following where associated with a Sales Office (Display Village) located in the 'Proposed Display Village Extent' shown on the 'Precinct Plan' in approved Plan of Development: (i) Ground sign; (ii) Pylon sign; (iii) Boundary fence sign; (iv) Flagpole sign;	◆ Advertising devices code
² -Zone as identified o	n the 'Zoning Plan' in the Twin Waters West Pla	un of Development
Operational work involving placing an advertising device on premises.	Accepted development if a third party advertising device erected on a Council owned bus shelter. Accepted development if:- (a) for a sign type described in the Advertising devices code other than one of the following:-	No requirements applicable Advertising devices code

(i) above awning sign; (ii) billboard identification sign; (iii) created roof sign; (iv) high-rise building sign; (v) projecting sign; (vi) pylon identification sign (except where located within a Display Village with 2 or more adjoining lots used for a Sales office); (vii) roof top sign; (viii) sign written roof sign; (ix) three-dimensional sign; and (b) not a third party advertising device, except where:- (i) erected on Council owned or controlled land; and (ii) used for sport and recreation	
purposes.	
Code assessment if not otherwise accepted development or assessable development subject to impact assessment.	Advertising devices code
Impact assessment if a third party	The planning scheme
advertising device erected on land other than	p
land:-	
(a) owned or controlled by the <i>Council</i> ; and	
(b) used for sport and recreation purposes.	

RECONFIGURATION OF A LOT

The application also requests a development permit for reconfiguring a lot for 182 lots as follows:

- 169 residential lots including:
 - 101 residential lots in Stage 1 (including 11 lots between 400m² and 500m²) and
 - o 68 lots in Stage 2 (including 15 lots between 400m² and 500m²);
- 1 community facilities lot;
- 11 open space lots; and
- 1 balance lot.

The above report considers the area subject to this application regarding suitability for development and the assessment against the relevant sections of the planning scheme, and considering the outcomes of the assessment of the Variation Request

The below provides further commentary on matters not already considered or requiring clarification.

Density

The development complies with the minimum lot size requirements, maximum number of lots between 400m² and 500m² and does not exceed 12 dwellings per hectare (noting this is assessed against the entirety of the site) recommended in the above sections of the report under the Variation Request.

Interface with adjoining properties

The Maroochy North Shore local plan code requires that:

PO21 Development in the Emerging community zone is master planned to ensure that development occurs in a logical and coordinated manner.

In partial fulfilment of Performance Outcome PO23:-

- AO23 Development for Multi-Unit residential uses does not adjoin or overlook a residence in the existing Twin Waters residential community.
- PO23 Development in the Emerging community zone maintains or improves the amenity of neighbouring premises having regard to:-
 - (a) overshadowing;
 - (b) privacy and overlooking;
 - (c) building character and appearance; and
 - (d) building massing and scale as seen from neighbouring premises.

The development complies with the acceptable outcome as no medium density uses are located adjoining the existing Twin Waters residential community.

However, there are three lots (4, 10 and 12 De Vere Road) that abut the proposed development and are not included as part of the application.

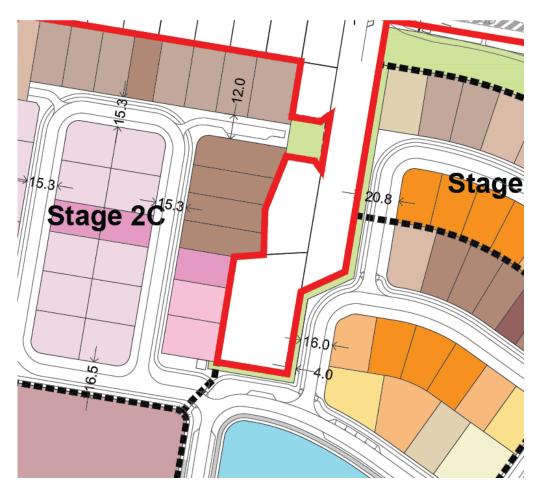


Figure 35 - Plan showing properties adjoining the proposed Twin Waters West development

Submissions were received from owners along De Vere Road that raise concern about the interface between the residential allotments on De Vere Road and along the eastern edge of the development.

Council requested that these lots be included in the development (as part of masterplanning for this area) or the interface between these lots be appropriately considered.

The applicant's response indicate that they were not able to obtain all owner's consent to include these properties in the application. Accordingly, the applicant proposes to consider the interface between the development and these properties by:

- limiting retaining walls along the common boundary with these properties to 1.8m in height, consistent with the height of a traditional good neighbour fence;
- a 1.5m transparent fence on-top of the wall except for the southern boundary of
 12 De Vere Road abutting the proposed road reserve;
- increasing building setbacks for those lots bordering existing residential lots (between 4 metres and 8 metres);
- reducing the height of these retaining walls as far as practicable by dropping the rear of each of the proposed allotments within Twin Waters West and introducing

- interallotment drainage to ensure the existing properties are not impacted by stormwater runoff from Twin Waters West; and
- providing landscaping within the rear of both the proposed and existing allotments to preserve the amenity of the existing residents.

Cross sections were prepared by the applicant as follows

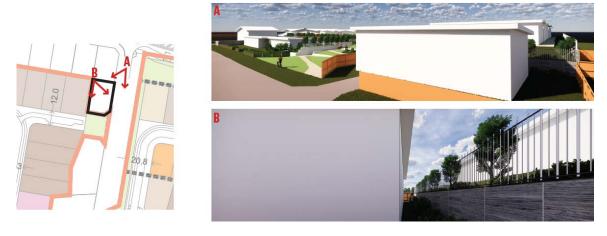


Figure 36 - Plan showing perspectives from 4 De Vere Road



Figure 37 - Plan showing perspectives from 10 De Vere Road

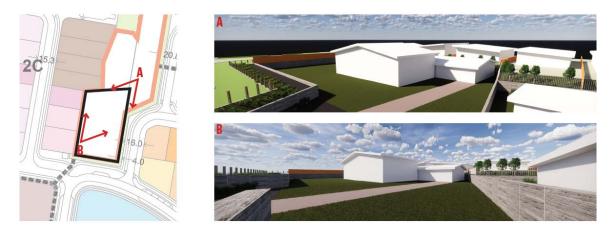


Figure 38 - Plan showing perspectives from 12 De Vere Road from the west



Figure 39 - Plan showing perspectives from 12 De Vere Road from the east

The interface between the development and these lots must consider the impacts of:

- overshadowing;
- privacy and overlooking;
- building character and appearance; and
- building massing and scale as seen from neighbouring premises.

These potential impacts can be addressed where the following outcomes are implemented:

- Maximum height of 1.8 metre high retaining wall on the boundary reflecting a typical boundary fence;
- 1.5 metre high pool fence on top of the retaining wall (unless the neighbours come to an arrangement which agrees to a higher, solid fence at the boundary line) except for the southern boundary of 12 De Vere Road abutting the proposed road reserve for acoustic measures;
- Providing interallotment drainage to ensure the existing properties are not impacted by stormwater runoff from Twin Waters West within an easement;
- Minimum 3 metre wide landscaped buffer with appropriate screening plantings prior to plan sealing occurring, within the proposed drainage easement at the rear of the new lots:
- All outermost projections of buildings being located 2 metres from these easements to ensure protection of the vegetation;
- Applying conditions of approval and property notations requiring the retention of this landscaping in perpetuity; and
- Offer from the applicant to neighbouring properties to plant additional landscaping to assist in screening the retaining wall (Council cannot condition landscaping to be planted on sites that do not form part of the application).

These measures should ensure that the amenity of those neighbours is protected.

CONSULTATION:

Referral Agencies

The application was referred to the following referral agencies in accordance with the *Planning Act 2016* and the *Planning Regulation 2017*:

Department of Infrastructure, Local Government and Planning (SARA)

The department is a concurrence agency for the following reasons:

- Reconfiguring a lot in a coastal management district;
- Material change of use involving work in a coastal management district;
- Operational work that is the removal, destruction or damage of a marine plant is assessable development;
- Development near or adjacent to State transport infrastructure generally;
- Reconfiguring a lot near a State transport corridor;
- Reconfiguring a lot that is a future State transport corridor:
- Reconfiguring a lot near a State-controlled road intersection; and
- Material change of use of premises near a State transport corridor or that is a future State transport corridor

The department responded by letter dated 8 November 2019 stating that conditions must be attached to any development approval including:

- Provide a signalised intersection (in lieu of the roundabout option proposed);
- Additional roadworks at the intersection of Sunshine Motorway and David Low Way;
- Provision of a bus route and bus stops (no shelters required to be provided) throughout the site (as amended by the State Government);

- Provide a pedestrian pathway network to bus stop on the northern side of David Low Way;
- Develop in accordance with the approved plans, notably the extent of urban and buffer areas shown;
- Development of a Fish Management Plan to be lodged with operational works;
- Additional targeted surveys and management plans for the protected Water Mouse;
- Maintaining appropriate water quality in the lake during construction;
- Preparation of an Acid Sulfate Soil Management Plan;
- Preparation of a Groundwater Monitoring Program;
- Filling, Excavation and Stormwater to be managed on the site, and not impact the State controlled road; and
- Achieving noise criteria for future dwellings and appropriate acoustic fences.

Other External Referrals

The application did not require any other external referrals.

Public Notification

The application was publicly notified for a period of 30 business days commencing on Tuesday 21 May 2019, and concluding on Friday 5 July 2019.

During this period, a total of 417 submissions were received, with 132 in support and 285 opposed to the development. Of these submissions, 388 submissions were properly made.

The following table provides a summary and assessment of the issues raised by submitters.

SUBMISSIONS INDICATING OPPOSITION OF THE DEVELOPMENT

Issues raisedOfficer CommentsHabitat ProtectionThe Habitat Protect

- Residential lots, roads, alkaline seepage from fill, and saline seepage displacing fresh ground water from the lake are all located well inside the trigger buffer distances for EPBC-listed species of the water mouse and wallum froglet.
- Protection and preservation of the salt marshes and wetlands is vital.
- Stockland proposes to locate residential lots, roads, the lake excavation and saline waters of the lake in the nominated buffer distances.
- Flood modelling demonstrates that increased flood heights and increased

The Habitat Protection of the site has been expanded by including areas nominated for multiple dwellings into the central wetland and ensuring the surrounding buffer areas are mostly retained as kangaroo grazing habitat with stormwater runoff treatment located close to or within adjoining road verges.

The salt marsh/highest astronomical tide areas are protected within Bushland Reserve and where removed for the lake interchange/fish passage will be "offset" (refer State conditions).

The estate design has been amended so that no private lots adjoin the central wetland; the wetland is now surrounded by the road and

- flood velocity will occur in the habitat of the water mouse and froglet.
- Fill sourced from neutralised acid sulphate material excavated from the lake void is to be extensively used within the nominated buffer distance to the park. This fill is highly likely to be alkaline with alkaline seepage. Water of alkaline pH can be harmful to soft, acid wetlands.
- Development encroaches into nominated buffer distances to wetlands and Declared Fish Habitat Areas.
- The medium density site adjacent to the ecological reserve should not be supported.

street network apart from the existing Twin Waters Estate residential lots. The benefits of this redesign alleviates impacts i.e. runoff and encroachment from adjoining lots, a greater ability to manage bushfire, and limb drop and the ability to treat urban stormwater runoff within the road (verge) network. The roads (surrounding the central reserve) are an accepted method of contributing to buffering bushland reserves applied to all other similar urban developments.

Kangaroos

- There is a remnant group of Eastern Grey Kangaroos which are specific to this region that have been an attraction to the area for the local residents as well as tourists.
- The area would be more suitable as a tourist attraction due to its scenic values and proximity to other popular natural attractions as well as an opportunity for Cultural Heritage initiatives such as an education centre/community hub where schools, universities and visitors could learn about environmental and historical values for the benefit of our region as a whole.
- There are concerns regarding likely impacts on the Eastern Grey Kangaroo population, both during the construction phase and the operational phase, due to impacts from noise, light, and excess movement of humans and machinery.
- A Kangaroo Management Plan must be formulated, in place, and implemented prior to the commencement of the construction phase of work.
- The kangaroos face a local extinction crisis.

An ecology report has been submitted by the applicant which specifically assess the impacts of the proposed development on the Eastern Grey Kangaroo population on the site.

Council's internal and external ecology experts have assessed the reports, and imposed conditions in the event of approval requiring dedication of the central ecological important area, management and conservation actions for the kangaroo population. These actions include the provision of (protective kangaroo fencing, road underpasses for kangaroos and other fauna, an extensive area of grazing habitat within and surrounding the central wetland, protected kangaroo movement corridors, kangaroo (protection) interpretive signage and the requirement for a local Kangaroo Management Plan to be incorporated into the Sunshine Coast Macropod Conservation Plan.

Vegetation Buffers

 Development has essentially ignored the provision of effective buffers to native vegetation and particular wetlands with Council's ecologist has assessed the proposed buffer widths, and imposed conditions and plan amendments in the event of approval to ensure the buffers demonstrate compliance with the assessment benchmarks.

separation distances being reduced to only metres in places. Fill located in buffer distances	The buffers to the ecological areas vary in width responding to the estate design constraints, drainage, elevation and vegetation. However, in all instances, buffers include the road and street network which is an accepted reserve management practice. The "acid habitat" suitable for "acid frogs" is
Fill is expected to be of on-site materials neutralised to a point where alkaline seepage is likely. The impact of this seepage on acidic local ecosystems has not been addressed	likely to be clear of the fill in most instances. A revegetation planting palette, which incorporates <i>Allocasuarina littoralis</i> , could address this impact over time as <i>Allocasuarina</i> leaf litter increases soil acidity.
Development has failed to establish the correct separation distances to the tidal zone or the declared fish habitat area of the river by using the incorrect highest astronomical tide	The highest astronomical tide and separation distance to the Maroochy River has been assessed in detail by council's hydrologists and determined to comply.
 Flood modelling indicates that the central wetlands on site are to be starved of water resulting in significant impacts to plants and animals. 	Council's ecologist and hydrologist have assessed the proposed layout and flood modelling, and confirmed that the central wetlands will be recharged through a series of linear stormwater treatment bio-pods. Further, the area located adjacent to the central ecological important area is intended to be dedicated to Council.
 The amendment process 'amended' those scenic amenity triggers in order that a future community led appeal would see those triggers nullified. The acoustic barrier will stop views of the kangaroo population on the site. 	The acoustic buffer adjacent to the Sunshine Motorway / CAMCOS will effectively screen the development. This screening will be augmented with extensive streetscape and recreation park landscaping treatments. The retention and expansion of the central melaleuca wetland as a bushland reserve will provide a distinct elevated forested background when viewed from the motorway. Kangaroo (elevated) viewing platforms are conditioned in the event of approval at the entrance to the central portion of the Melaleuca Wetland Reserve.
	Council officers have undertaken an assessment of the development against the Planning

- Council is conflicted as it apparently supports the development.
- Need for truly independent review by WMAWater of modelling to satisfy concerns on house insurance premiums.
- Site is constrained and flood prone.
- Flood modelling has shown increased flood levels to the Maroochy River Conservation Park and to Maroochy Waters and Maroochydore and the motorway.
- Flood modelling outputs demonstrate flood impacts greater than +10mm in the development area adjacent to properties within Stillwater Drive, Twin Waters, within the Maroochy River conservation area and also within Bando Street, Pacific Paradise.
- Flood modelling demonstrates an unacceptable adverse impact on the wetlands within the Twin Waters West site.
- Flood Report does not contain an adequate calibration or verification statement to provide evidence that the flood model is accurate.
- Comprehensive modelling study using the full spectrum of tide levels against multiple storm events is warranted.
- There is no data as to how storm flows are managed within the Sunshine Coast Airport development.
- Will leave council & councillors open for group action and litigation after a flood event
- Recent rain events in Townsville demonstrate that extreme flooding is becoming more common

Scheme requirements. The flood modelling has been peer reviewed by an external hydrologist.

The site simply being flood prone does not mean it cannot be developed. Extensive flood modelling, assessment and reporting has been completed looking at whether this flood prone land can be developed. The flooding constraint is managed in accordance with the Planning Scheme.

The latest flood modelling does not show any impact to Maroochy Waters, Maroochydore or the motorway. Increased flood levels are proposed within the section of the Maroochy River Conservation Park immediately abutting the site. The predicted increase in flood levels in this area have been assessed as not adversely affecting the conservation land and represent a slight increase in the depth of flooding over an area which is already inundated by deep floodwaters.

As a consequence of diverting more floodwater away from Twin Waters, there is a minor increase in the depth of floodwaters in the Maroochy River Conservation Park. There is a reduction in the depth of floodwaters in Stillwater Drive.

Impacts of 10 to 25mm are predicted within the Bando Street area of Pacific Paradise during a 10% annual exceedance period event only during the Phase 1 Construction. No impacts are predicted for the 39% or 1% annual exceedance period event. This is a temporary situation and flood property damage is already expected during the 1% annual exceedance period at this location, not the 10% annual exceedance period.

An adverse impact to the wetlands on the site would occur if saline or brackish water more frequently flooded the freshwater wetlands and the wetlands were not flushed with freshwater. The floodwaters entering the wetland are expected to be fresh. If brackish lake water enters the wetlands, then there will always be subsequent fresh floodwater immediately following to flush any brackish water out.

The model used is adequately calibrated to Council's model and shows good agreement.

Multiple storm events have been modelled with a dynamic storm tide tailwater level. The peak of the storm tide has been modelled as coinciding with the peak of the rainfall.

The approved topography associated with the Sunshine Coast Airport Expansion Project was input into the flood model.

Flooding associated with extreme rainfall events has been considered in the reporting and assessment

Flood Emergency Management Plan

- The Flood Emergency Management Plan cannot be regarded as providing surety of safety for people in the proposed development or within the adjacent Twin Waters community area. The conclusions 80% of the site population. and plans are all based on their data and assumptions rather than consideration of deviations caused by inaccuracies.
- No final version of the document has been issued by the applicant.
- While the list of definitions includes "Risk", it does not provide definitions of "Likelihood levels or Consequence outcomes" and no "Risk Matrix" as per the Sunshine Coast Local Disaster Management Plan 2019-2022.
- All of the activation levels are heavily reliant on Resident decision-making requiring "self - evaluation" of varying conditions. It assumes that residents have the necessary means to enable continuous monitoring, are aware of correct access ways to safely evacuate and are capable of self- evacuating.
- Accommodating 10% of the site population in any facility is not justified.
- There is currently no Baptist Church registered as a place of worship in the subject area.
- No provision has been made to accommodate the occupants of Twin Waters in any the proposed Flood Refuge.

The applicant has provided a Flood Emergency Management Plan to demonstrate the safety of people during Safe Refuge Building above the PMF level is required to be constructed.

The facility is intended to be able to cater for

The activation of the Flood Emergency Management Plan are based on implementation by the Sunshine Coast Local Disaster Coordination Centre, Further, Council is not relying on implementation of the Flood Emergency Management Plan to ensure the safety of people during an extreme flood.

Likelihood of a flood event is expressed in Annual Exceedance Period and should be read in conjunction with the Flood Study on which it is based. No risk matrix is necessary as there is no residual risk in a probable maximum flood event.

The Planning Scheme does not require the applicant to provide a flood refuge for Twin Waters residents. However, the facility is intended to be operated by council in a flood event. The development will not be gated and would provide a site of high flood immunity within the Maroochy North Shore area.

Lake

- No demonstrated need for constructed waterbody.
- The applicant has not produced adequate or satisfactory lifecycle costs for the lake.
- There is no need for the lake to facilitate improved drainage from Pacific Paradise.
- The Twin Waters West lake (constructed waterbody) needs 43,200 cubic metres of water per day to be mechanically pumped from the existing TW canals to keep the TWW lake fresh, which is not in accordance with planning requirements.
- The Twin Waters West lake is too deep (>3m).
- This pumping will adversely impact the Twin Waters aquatic environment by sucking in fish and other aquatic life from the Twin Waters canals.
- Intervention by pumping at 1000litres/second for 12 hours a day from the existing lake to the proposed lake facilitating flow in one direction only, risks degrading this proven natural two-way tidal flow salinity exchange system, in addition to introducing issues of potential outages, expensive maintenance and operating costs and possible noise pollution.
- The pumping will cause increased erosion of the Twin Waters canals, the revetment walls to each and every canal property both downstream and upstream of the pumping station and also around the existing weir structure.
- There are inadequate maintenance provisions and lifecycle costs for the Twin Waters West lake.
- The presence and safety issues of Bull sharks in canals and artificial waterways

The local plan requires an extension to the existing Twin Waters waterbody to be provided.

The lifecycle costs of the lake have been significantly increased following further negotiations after the response to Council's information request. The costs have been based on actual costs which Council incurs to maintain the existing constructed waterbodies in the region.

The volume of water which ultimately ends up being pumped will depend on what is required to maintain adequate salinity in the waterbody. A mechanical pumping system is in accordance with the local plan requirements providing a suitable sinking fund amount is provided. The applicant has entered into an Infrastructure Agreement to provide the required sinking fund amount.

The proposed lake is deeper than the 3m depth recommended by best practice guidelines. The guidelines have been written to primarily provide design guidance for freshwater waterbodies. The primary problem with deeper lakes is stratification. A lake turnover assessment, stratification assessment and monitoring of the existing Twin Waters lake, which is over 12m deep in parts, has been undertaken. Both the modelling of the proposed lake and monitoring of the existing lake show no stratification.

Two way flow and tidal mixing of the existing Twin Water Lake will still occur. The pumping is likely to result in better mixing and reduced turnover time in the far north area of the existing Twin Waters Lake.

The proposed pumping has been modelled and no negative effect with respect to increased erosion in the existing Twin Waters Lake is predicted. The proposed pumping results in a small decrease in low tide levels (-37mm for average low tide) and small decrease in average high tide (-44mm for average high tide) with no change in high tide level for tides above 0.8m AHD. The proposed pumping will therefore not have a significant impact on scour in the existing Twin Water Lake.

Water Quality of Lake

- It is highly probable that the true turnover greater than 30 days due to the cumulative impacts from first pumping waters from the Twin Waters canals into the Twin Waters West CWB
- Water depth in Twin Waters West will be 5-12 m deep compared to the average water depth of 4m in the existing Twin Waters canal system, which is not in accordance with the recommended standards.
- Reliance on mechanical pumping for salinity exchange within the TWW CWB pumping device is highly likely due to blockages, storm events, flooding, power outages, and general mechanical failure. This will undoubtedly lead to compromised water quality.
- Water quality on existing lakes around golf course ruined by previous Stockland development.

Costs associated with managing the lake system and marine life in the proposed lake have been included in the sinking fund amount in the infrastructure agreement.

The lake turnover analysis has been undertaken considering a combination of the existing Twin Water Lake and proposed Twin Waters West rate in the Twin Waters West CWB will be Lake. The existing Twin Water Lake has been found to turnover in 9 to 12 days (tidally dependent) with the proposed Twin Waters West Lake having a turnover time of 22 days. Following a major flood event the salinity concentration in the proposed lake has been modelled to return to an acceptable level within 45 days. This turnover time has been assessed as being suitable for a lake of this nature.

The primary problem with deeper lakes is stratification. A lake turnover assessment, stratification assessment and monitoring of the should be rejected. The breakdown of this existing twin water lake which is over 12m deep in parts has been undertaken. Both the modelling of the proposed lake and monitoring of the existing lake show no stratification.

> Detailed analysis of the proposed system has shown that it is not necessary to strictly comply with a 30 day lake turnover to maintain suitable water quality within the proposed. Twin Waters West Lake. The proposal is for two pumps to be operating at the same time for 12 hours per day. If one pump fails the then remaining pump operating for 24 hours per day would also achieve the required lake turnover. Alternatively when both pumps came back online they could be operated for longer to make up for lower volumes pumped when one pump was out of action.

Existing lakes around the golf course are freshwater lakes and not comparable to the proposed brackish lake.

Erosion

The Stockland DA does not discuss impact of the new TWW lake pumping station on the serious erosion issues in the TW canals near to the TW weir.

The proposed pumping will have no negative effect with respect to increased erosion in the existing Twin Waters Lake. Peak velocities, much higher than velocities caused by the pumping, occur in the existing lake when there is a large variation between the high and low tide levels and this will not change as a result of the proposed development.

Building Height

- No relaxations to building height should be given.
- Removal of height restrictions is not supported.

The application has proposed additional building height in certain precincts of the site as part of the Variation Request component of the application. As part of Council's Information Request and Further Advice letter, a visual assessment was required to be submitted which demonstrated the impacts of the proposed additional height.

Assessment of this determined that the additional height was appropriate for the Community facilities zoned site only.

Character and Density

- Twin Waters West will have increased lot densities not in keeping with the overall character of North Shore and Twin Waters in particular.
- Any development should be "equal to or better than" Twin Waters.
- Council approving the building of dual occupancy homes in Twin Waters West could nearly double the number of vehicles, which would cause enormous traffic congestion issues at the proposed David Low Way roundabout.
- Average lot sizes are significantly smaller in TWW which when considered with the smaller front/back yards being proposed will lead to a comparatively 'closed in' feel (and parking issues will be exacerbated.
- The average lot sizes should not be varied from the acceptable outcomes of the planning scheme.

As part of the scheme amendment process, Council was satisfied that these density provisions would reflect what exists in the adjoining Twin Waters Estate given these were:

- reflective of the smallest lot of 403m² in the existing Twin Waters community
- reflective of the proportion of lots less than 500m² in the existing Twin Waters community generally consistent with the density of low density residential uses in the existing Twin Waters community
- consistent with the density range prescribed in the Multi-unit residential uses code of the planning scheme and generally consistent with the Explanatory Memorandum to the Sunshine Coast Planning Scheme 2014 (Major Amendment) No. 12 Page 13 proportion of multi-unit residential uses in the existing Twin Waters community.

Accordingly, the proposed changes to density can be supported as the resultant development would be consistent with those in the adjoining Twin Waters Estate.

Cultural Heritage

- There is a lack of ethnographic research, cultural heritage assessment and DATSIP site recordings of Kabi Kabi historical archaeology and Kabi Kabi intangible heritage.
- The proposed development is not in alignment with the values of Kabi Kabi and wider community.
- Consultation with Aboriginal and Torres Strait Islander groups in the local area

A Cultural Heritage Management Agreement was executed by Stockland and Kabi Kabi representatives Archaeo Cultural Heritage Services, in August 2019. The objectives of this Cultural Heritage Management Agreement are to provide for the identification, protection and management of Cultural Heritage in the Project Area (Twin Waters West), and are outlined in the report.

Execution of this Cultural Heritage Management Agreement demonstrates a genuine intent by

must be undertaken, along with provisions for avoiding adverse impacts on areas of cultural heritage significance.

- This area has a high potential of containing Aboriginal cultural heritage sites due to the presence of the two MSES areas, which contain old growth vegetation.
- There are numerous Aboriginal Cultural Heritage sites listed on the DATSIP state government Aboriginal Cultural Heritage Database found in close proximity to the proposed development, which demonstrate that this area has a high potential for Aboriginal cultural heritage sites and archaeological sites to exist.

Stockland to engage with the local First Nations people to have their interests considered and reflected in the proposed delivery of the new community.

Settler's Park

- The roundabout design and bike-way threatens heritage-listed mango trees.
 The loss of the park would not be necessary if the estate entrance returned to the earlier proposed location opposite Toyango St.
- The arborist report does not address the enhancement of protection to the trees or character, setting or appearance of the local heritage place.
- The recently prescribed local heritage place is to lose 20% of the area designated to protect the listed mango trees.

The mango trees are to be retained in situ and an arborist report has been provided confirming this.

An additional area of park has been dedicated in the central part of the site to supplement the retained component of Settlers Park along the frontage of the site.

Traffic Impacts

- Traffic impacts have been underestimated, and walking north to Pacific Paradise school and shops will become more difficult.
- Traffic impact of the Twin Waters West development as represented by the traffic report is optimistic.
- The option of a signalized intersection at the David Low – Ocean Drive corner to significantly improve the safety of pedestrian movements across these busy areas was not tested.
- Ocean Drive should be enlarged and made 2 lanes in each direction between that roundabout and the Motorway.

The submitted traffic reports have been assessed by Council's traffic engineer, and determined that the development does not result in detrimental impacts to the external road network. A secondary, local street connection is proposed at the south-eastern part of the site to link with Stillwater Drive at the existing Esperance Drive roundabout. This promotes local connectivity and integration within the overall Twin Waters area and is consistent with the requirements of the *Maroochy North Shore local plan code*.

Relevant changes and conditions can be imposed in the event of approval.

- No infrastructure has been proposed to be installed prior to or simultaneously with the development, e.g. a widened Sunshine Motorway providing access to and egress from the development, a widened David Low Way to better facilitate the existing and increasing stress of traffic from Bli Bli to Noosa, installation of traffic lights at the intersection of David Low Way and Ocean Drive.
- Road cyclists should be banned from TW and TWW and, if the access at Esperance Drive roundabout is to be allowed to remain, it must be with road stops that will be so severe as to compel cyclists to dismount.
- Stillwater Road was not designed as a thoroughfare per their proposed plan and an alternative entrance between Brushbox Circuit and Wattlebird Drive is more acceptable due to the fact that the road is a shorter distance between Ocean Drive and the new development and thus also deterring nuisance traffic and limiting any risks.
- Godfreys Road should be used as a secondary access point.

The State as Concurrence Agency have assessed the traffic information provided and imposed conditions relating to the State controlled road network. Of note, the applicant had proposed a multi-lane roundabout for this intersection. However, the State Government has provided conditions of approval requiring the four-way intersection be signalised to provide a safer and more efficient movement outcome for pedestrians and cyclists at this location.

Key Resource Area

 Development is proposed within the key resource area separation area clearly marked on council maps within which increased resident numbers are not to be permitted. A Key Resource Area (KRA No 150) is identified on the western side of the Sunshine Motorway extending across David Low Way, and covering the existing Maroochy River Golf Club.

While the development does materially increase the number of people living in the extractive resource separation area, the purpose of the Extractive resources overlay code is to ensure that the ability to win the resource is not affected.

Given the proposed acoustic fence, and the method of extraction, it can be concluded that the proposed development would not prevent or interfere with the current or future viability of winning or processing of the extractive resource.

Acid Sulphate Soils

 Stockland have stated excavation methods have yet to be decided for the The applicant provided an Acid Sulfate Soils investigation for the site. The recommendations of this report indicate:

- lake. This material is acid forming and considered hazardous by the State.
- No management plan for this large volume has not been developed.
- The project has not committed to isolate and contain the excavations of ASS or treatment areas from surface or ground water flows.
- The groundwater assessment does not recognise the internal complexity of the site.
- The impact of alkaline treated ASS fill immediately adjacent to soft, acid wetlands has not been recognised.
- The acid and released metals can and will have many damaging effects in the waterways and impact mangroves which are breeding grounds of small fish.
- The entire ecosystem of the Maroochy River is under threat.

- Earthworks should be appropriately staged and sequenced to limit the extent of disturbance to soils and groundwater so appropriate control measures can be taken;
- Lake construction will require the implementation of suitable groundwater monitoring program to monitor potential groundwater drawdown and changes in groundwater quality
- Neutralising all existing and potential acidity through addition of agricultural lime as per the Queensland Acid Sulfate Soil Technical Manual, Soil Management Guidelines;
- During construction, all accumulated surface water and collected groundwater seepage to be controlled on site, monitored and treated where required to comply with the appropriate discharge criteria.

Conditions can be applied to require a site specific Acid Sulfate Soils Management Plan, for each stage, to be endorsed through an operational works approval.

Plan of Development

 No variations should be accepted that lessen the existing assessment obligations on any future material change of use over the land at Twin Waters West.

Detailed assessment of the proposed variations and constraints of the site has been undertaken as part of the assessment process.

Therefore, a number of changes to the Tables of Assessment have been incorporated into the approval of the site, enabling future development to occur in accordance with the master plan.

This approach complies with the intent of Performance Outcome PO21 of the *Maroochy North Shore local plan code* to provide a master plan to ensure that development occurs in a logical and coordinated manner.

In regards to setback considerations for the future dwellings, there are no grounds to support the applicant's proposed changes, and the Planning Scheme and *Queensland Development Code* provisions will apply.

Economic matters

 The applicant has not provided sufficient information to allow a valid assessment of The applicant submitted an Economic Impact assessment, and a revised assessment in response to Council's Information request and Further Issues letters. The assessment has

the impact on existing local businesses to be made.

been reviewed by Council's appointed economic expert, and concludes that:

- demand for the proposed retail component of the development at the subject site does not manifest prior to 2026, as prior to this time period the development is reliant primarily on trade from the secondary trade area;
- there will be some demand for additional long day care places at the subject site by 2024, with approximately 60 long day care places supportable by 2026 and increasing to 80 long day care places in 2029; and
- there is limited demand for another gym within the main trade area in the short to medium term.

On this basis, some limited commercial uses can be supported

Amenity on residential allotments in De Vere Road

- Potential for worsening of flooding of my land as a consequence of the volume of filling and retaining walls (1.5 to 2 metres in height) proposed for the development site.
- Lack of confidence in the drainage solution for De Vere Road.
- Adverse impacts on traffic at the intersection of De Vere Road and David Low Way.
- Amenity impacts on these properties due to the filling height of the proposed surrounding development.
- 'Terracing' of the proposed retaining walls and fencing around my property would soften the impact of the proposed height differential between my property and the development site.
- Willingness from all three parties to be included in application.

sections of the proposed interface with the existing residences in De Vere Road.

The applicant submitted a number of cross-

These cross-sections show the intention to limit retaining walls along the common boundary with these properties to 1.8m in height. The height of these retaining walls have also been reduced as far as practicable by dropping the rear of each of the proposed allotments within Twin Waters West and introducing interallotment drainage to ensure the existing properties are not impacted by stormwater runoff from Twin Waters West.

The drainage system in De Vere Road and associated new pipe connecting De Vere Road to the proposed lake will be sized during the detailed design, which occurs as part of the subsequent civil operational works development application. Conditions of approval are recommended requiring the drainage system and associated pipe to be designed in accordance with the Queensland Urban Drainage Manual.

Consistency with purpose of the *Planning*Act 2016

 The development does not meet the purpose of the *Planning Act 2016* The application has been assessed in accordance with the *Planning Act 2016*.

Council's assessment of the proposed application has determined that the risks and consequences are able to be mitigated through

regarding achieving ecological the specifics of the proposal and conditions of sustainability. approval. The application does not advance the purpose of the Planning Act 2016. The precautionary principle should apply where some risks to be deemed unacceptable not because they have a high probability of occurring, but because the consequences if they occur may be severe or irreversible. Need The development is located within the Urban Footprint of the South East Queensland Regional Plan. Having regard to the South East Twin Waters West is not needed to Queensland Regional Plan, the development is accommodate growth via expansion to broadly consistent with the outcomes expressed meet South East Queensland Regional and sought to be achieved by the South East Plan requirements. Queensland Regional Plan. Council has exceeded the most current benchmarks as outlined in SEQRP The site has been zoned for residential uses as Monitoring Report without this part of the Planning Scheme. development. ABS confirms SCRC has already met growth targets by 120% An Overriding Need in the Public Interest (ONPI) has not been demonstrated for this particular housing estate at this time to permit exemption from compliance with the planning scheme. Impact of Coastal Hazard Adaptation In accordance with the requirements of the Strategy and Intergovernmental Panel on Planning Act 2016 and Development Assessment rules, council is required to assess Climate Change and decide the application against the applicable policies and Planning Scheme at the It would be irresponsible of Council to time of the application, and within the legislative approve this development until both the timeframes. Coastal Hazard Adaptation Strategy and Intergovernmental Panel on Climate Council are unable to delay the assessment Change report are released and applied and determination of an application until new to this area. policies are implemented. Noise and dust mitigation can be conditioned in Noise and Dust the event of approval through the approval of Construction Management Plans. Approximately 1 million cubic metres of material is to be excavated from site and used as fill but noise and dust issues have not been addressed. Impacts on Insurance Premiums It is understood that Insurance companies may

consider flood mapping as part of their

assessment process.

Coastal Hazard and Flood Mapping has not been updated by Council and is relied

upon by insurers to assess risk of flooding as per SPP 2016.

 Higher insurance quotes from insurers, or have been declined insurance within the 4564 postcode, apparently due to the Twin Waters West development Commercial decisions made by insurance companies are not a matter that council can consider as part of the application assessment process as this is outside council jurisdiction.

Water and Sewer Connections

- There is inadequate information within the Twin Waters West Development Application, on water or wastewater utility services.
- Sewerage Pump Stations will need to be located away from the existing Twin Waters development or ensure that there is no odour concerns.

Council does not have jurisdiction to assess or request information regarding water and sewer connections. The applicant must liaise separately with Unitywater to ensure adequate servicing is available to be provided for the development.

Other uses for the site

- The Twin Waters West site is the ideal location for a Cultural Interpretive Centre and should be donated by Stockland.
- Council should purchase the site as a coastal recreation park.
- Land would be suited for an eco-habitat park

Council is unable to request the Developer / Applicant to provide facilities which are not required by the *Sunshine Coast Planning Scheme 2014.*

The subject site is not included within the *Local Government Infrastructure Plan* to be acquired for park. It is noted that substantial area of the site is to be dedicated to Council for recreational and conservation purposes.

The dedication of the expanded central melaleuca wetland and associated open space corridor to the Maroochy River Riparian Corridor plus all areas below highest astronomical tide save the Environment Levy Funds for additional ecological securement throughout the Local Government Area.

Other matters

- Will Council and/or Stockland indemnify any purchaser who buys a block of land or house in any of the affected areas who then finds they are subject to flooding or indemnify individuals impacted by this decision?
- What protection has the ratepayer against increased rates from a decision of SCRC made by the current Mayor and councillors?

Council's flood mapping is publicly available.

Rating is not a consideration of the development application process and is considered separately by the council as part of budgetary processes.

 Council has not taken up a positive position against climate change. The development application is required to be assessed against the planning scheme and policies in place at the time of the application.

 The more efficient businesses become, the less employment opportunities exist and the more unemployment. The Shire neither needs nor wants more unemployment. Noted.

 The TWW development is demonstrably not worthwhile, nor intelligent and is a serious detriment to our environment and communities. The development application must be assessed against the *Sunshine Coast Planning Scheme* 2014 based on its merits.

 The proposed development is not in alignment with the sustainability targets needed for a successful Biosphere Reserve nomination.
 Ruins councils chances of receiving BIOSPHERE status The development application may only be assessed against the applicable assessment benchmarks in accordance with the requirements of the *Planning Act 2016*.

 Crime is on the rise in Pacific Paradise, Twin Waters and Mudjimba. It will only get worse with this development. This is not a relevant consideration for assessing a development application.

 Acoustic barrier should be vegetated to reduce likelihood of graffiti. Buffer planting will be conditioned in the event of approval.

 Development should have more open space to allow for children to play. It is noted that substantial area of the site is to be dedicated to Council for recreational and conservation purposes. Parks have been provided in accordance with planning scheme requirements.

 Where are all these people are supposed to be coming from and who are expected to buy all these homes in these housing developments. This is not a relevant consideration for assessing a development application.

 Close proximity to your neighbours causes conflict in the family home due to your neighbours being able to hear arguments and you speaking normally. Nothing will be private especially when the young ones become teenagers and they start to voice their opinions. This is not a relevant consideration for assessing a development application.

There has been no meaningful consultation with the community.

Public Notification has been completed in accordance with the *Planning Act 2016*.

- Previous judgement given by the courts still applies
- The existing Coles at Pacific Paradise is already at capacity.
- A construction management plan is required.
- There is no effective plan in place to prevent the above from adversely impacting adjoining communities and no commitment to offsetting and reimbursing/compensating adjoining residents for restoration and clean-up costs.
- The develop at any cost attitude of the current Council and Mayor and the associated developer preferred attitude, against the interests of communities and ratepayers, has caused and continues to cause extreme levels of stress and anxiety among existing residents.
- Council defended an appeal previously what has changed?
- Additional people will use the boat ramp which is already full at peak times.
- Development will de-value existing properties.
- Development is too close to motorway to facilitate future rail line.
- Council and Stockland have a financial agenda.
- Sunshine Coast on its way to becoming another Gold Coast.
- Court ruling in 2013 stated that no development shall occur on flood plain or flood prone areas. Court ruling has not changed since original Stockland DA was dismissed.

The subject land was zoned for urban purposes in March 2018.

This is not a relevant consideration for assessing a development application.

In the event of approval, a construction management plan can be conditioned.

The proposed application is consistent with the intent and zoning for the site. The constructed water body (lake) is supported by a Sinking Fund which will enable Council to continue maintenance of the lake over time.

The proposed application has been assessed in accordance with the *Planning Act 2016* and the *Sunshine Coast Planning Scheme 2014*. The Public Notification process has enabled local residents to make submissions on the proposal, and provides third party appeal rights in relation to Council's decision.

The subject land was zoned for urban purposes in March 2018.

This is not a relevant consideration for assessing a development application.

This is not a relevant consideration for assessing a development application.

The proposal takes into account the CAMCOS requirements as outlined by the State Government as evidenced by their Referral Agency Response and conditions imposed.

This is not a relevant consideration for assessing a development application.

This is not a relevant consideration for assessing a development application.

The subject land was rezoned for urban purposes in March 2018. Impacts of developing within flood prone land have been thoroughly assessed during the application process.

The application includes a Variation Request Opposition to varying AO22 (a) & (b) of Maroochy North Shore Local Plan Code under the *Planning Act 2016*, and council must as well as relaxing of council consider the proposed variations as part of the environmental rules. application process. The Development application is Impact This should never be considered a code assessment application. Assessable and has followed the Impact assessment process in accordance with the Planning Act 2016 and Development Assessment Rules. Regional hospital already stretched of This is not a relevant consideration for resources. assessing a Development application. This is not a relevant consideration for SCRC needs to take examples from Noosa shire council (i.e. capping the assessing a Development application. It is noted the site is within the Urban Footprint of

the South East Queensland Regional Plan.

SUBMISSIONS INDICATING SUPPORT OF THE DEVELOPMENT

number of people).

Issues raised (Officer Comments
Retention of Vegetation		Support is noted. Significant areas of vegetation are retained in accordance with the
•	Protection of large trees is commended, as are the considerations and retention of flora and fauna.	requirements of the Sunshine Coast Planning Scheme 2014.
•	Large amounts of land being retained 'as is', as proposed.	
	onsideration of Kangaroo Population	Support is noted. An ecological assessment was provided by the applicant and assessed
•	The local kangaroo population has been considered in the development proposal. Kangaroo population will be able to	and considered by Council's internal and external ecology experts. Relevant conditions have been imposed.
	access the Twin Waters site and utilise retained vegetated areas.	·
•	Natural wildlife corridors allow to movement of wildlife between the development and is highly supported.	
Ar	nenity and Open Space	Support is noted.
•	There are considerable facilities allocated with a community centre and open space and large parks providing good natural amenity for residents. Extensive landscaping and waterways provide attractive amenity.	

Waterway Support is noted. The proposed waterway provides amenity for residents and acts as flood prevention in times of high rainfall and to manage storm water. Proposed walkable waterfront provides amenity for residents and is supported highly. Flood immunity via waterway, stormwater, lake and associated stormwater infrastructure has been addressed. Traffic Consideration Support for a roundabout is noted. However, the State Government as Concurrence Agency The current T-intersection on Ocean have conditioned the approval to include an upgraded signalised intersection in this Drive has safety issues. The proposed location. new roundabout at Ocean Drive is safer and more efficient. Walking and Cycle Paths Support is noted. Pedestrian and cycle paths are noted on the proposed Plan of Development - Pedestrian and Cycle Consideration has been made regarding connectivity, and conditioned as part of the active transport, namely walking and approval. cycle paths. This promotes healthy and active lifestyles in accordance with the broader Sunshine Coast lifestyle. Location Support is noted. The subject land was zoned for urban purposes in March 2018. The development is proposed on land that has been earmarked for urban development for 10 years and is already cleared, with no farming activity taking place on the site for some time. The land will eventually be developed as it is zoned for urban use. This proposal has taken into account community concerns and works collaboratively deliver a development that meets community and environmental expectations. Extension to existing Twin Waters Comments are noted. The proposal has been assessed against the requirements of the Development Maroochy North Shore local plan which contains specific provisions relating to The proposal considered as 'equal to or better than Twin Waters. integration with the existing Twin Waters

development.

It is a logical extension to the existing Twin Waters development. The proposal connects and integrates well with existing Twin Waters development. Balance of Uses Comments are noted. The proposal has been assessed against the requirements of the Maroochy North Shore local plan which The master plan demonstrates a balance contains specific provisions relating to lot sizes, of uses with low density, detached, freehold housing that complements the density and open space. existing Sunshine Coast lifestyle. The provision of mainly low density housing is supported. The mix of lot sizes can be considered equal to or better than the existing Twin Waters development as there are more options. The provision of larger lot sizes (above 400m²) has been provided. A balance of housing with open space has been achieved. Positive Impacts on Local Support is noted. Businesses/Jobs and Job Creation The proposal offers economic stimulation on the North Shore and population growth in the area will support local businesses. Development of the proposal will create jobs for local residents, especially during construction and allow for workers to work on the Sunshine Coast instead of travelling to Brisbane for work. New development will support and grow service base. Close Proximity to New CBD Support is noted. The subject site is located approximately 10km from the Maroochydore CBD. The proposal is within close proximity to the new Maroochydore CBD and will allow for people to live close to their work once the new CBD is constructed. **Urban Design** Support is noted. Future building design will be considered as part of subsequent development applications. The proposed development incorporates

high quality urban design that reflects

the opportunity.

•	Buildings standards will be enforceable	
	through a building covenant.	

CONCLUSION:

The proposed development has been assessed against the *Sunshine Coast Planning Scheme 2014* requirements, notably the overlay codes, and the *Maroochy North Shore local plan code* and satisfies the requirements of the Planning Scheme. This has reduced the developable areas proposed by the applicant, and where appropriate, reasonable and relevant conditions have been applied to ensure ongoing compliance with the planning scheme requirements. The application is therefore recommended for approval.