

AQUIS RESORT AT THE GREAT BARRIER REEF PTY LTD
**ENVIRONMENTAL IMPACT
STATEMENT**

VOLUME 1

**CHAPTER 5
LAND USE**

5. LAND USE

5.1 EXISTING LAND USE

The 340.6 ha Aquis Resort site is currently used predominantly for sugar cane production. Of the total area, 211 ha (62%) is currently under cane while the balance consists of natural areas, cleared but unfarmed areas, farm infrastructure (roads, farm dams, and various structures), and abandoned aquaculture ponds. These features are shown on **Figure 5-1**.

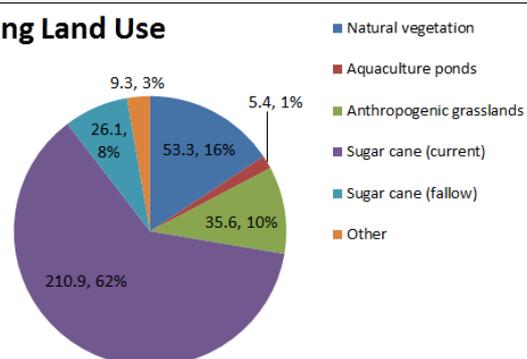
- Land formerly cleared for sugar cane but which has been abandoned due to salinity issues is referred to as man-made or anthropogenic grassland. It contains some areas of marine plants that have recolonised the cleared areas and has some habitat values.
- The abandoned aquaculture ponds are man-made dams formerly created for fish-farming. This activity was abandoned many years ago and the ponds have been colonised by a range of native and exotic plants and animals. Water levels vary considerably over the year and they are seasonally used by many species of birds as described in **Chapter 7**.

A geographic information system (GIS) analysis of the land use data is provided in **Table 5-1** below.

TABLE 5-1 EXISTING LAND USE

LAND COVER	AREA (ha)	% of SITE
Natural vegetation	53.3	16%
Aquaculture ponds	5.4	2%
Grasslands (former cane land)	35.6	10%
Sugar cane (current)	210.9	62%
Sugar cane (fallow)	26.1	8%
Other	9.3	3%
TOTAL	340.6	100%

Existing Land Use

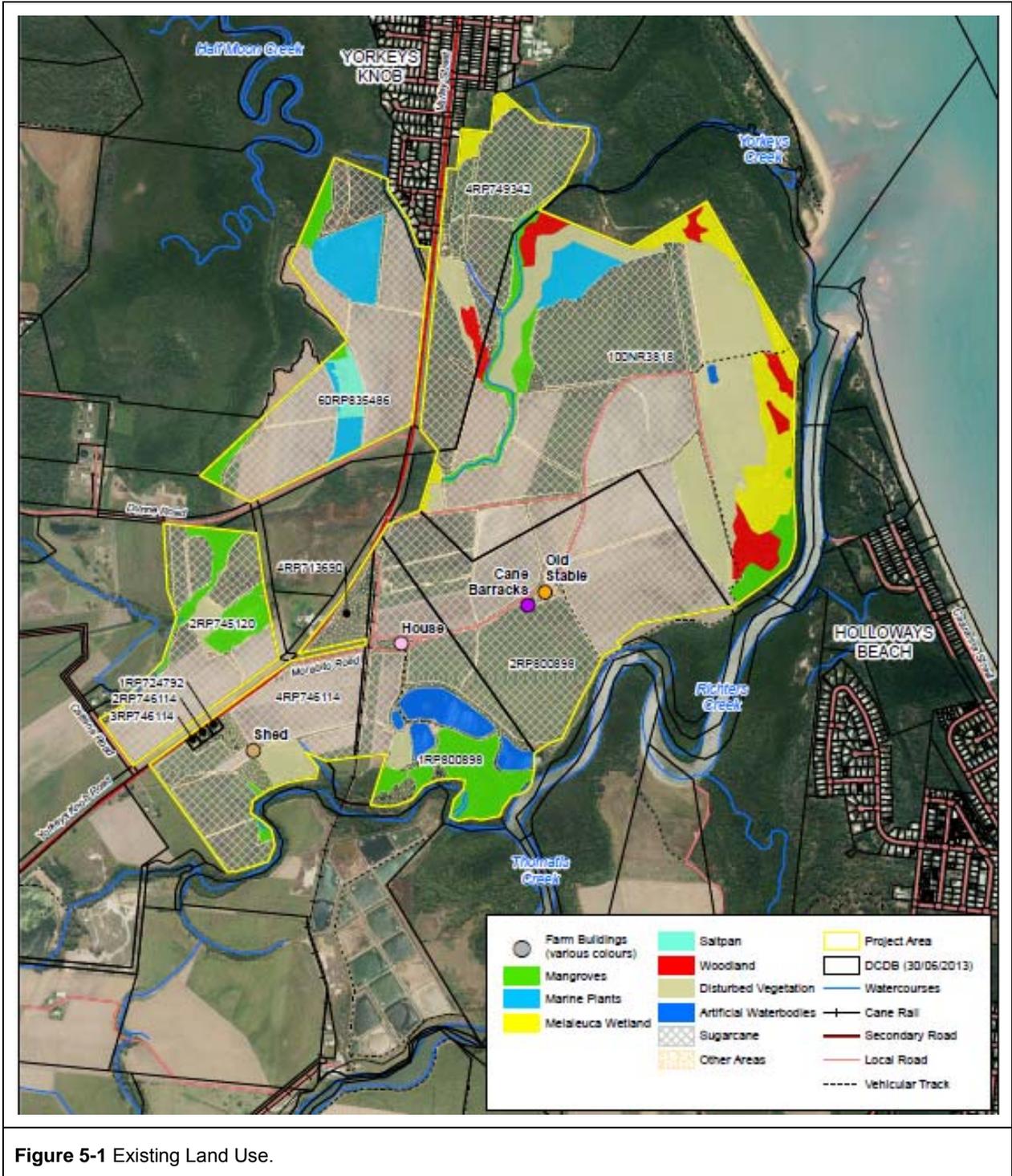


- Natural vegetation
- Aquaculture ponds
- Anthropogenic grasslands
- Sugar cane (current)
- Sugar cane (fallow)
- Other

Source: Study team compilation based on GIS analysis of field data and air photo interpretation.

The 'other category' includes:

- residences
- farm buildings including equipment sheds and a former cane barracks
- a section of cane tramway
- roads and tracks
- exotic plantings.



The land is included in the Regional Landscape and Rural Production Area in the FNQ Regional Plan 2009-2013 and in the Rural 1 Planning Area under the CairnsPlan 2009.

The site is currently used for sugar cane farming and it is known from experience from other areas in the Barron River delta that there are likely to be small areas of contaminated soil, especially around fuel storage areas and where agrichemicals have been handled.

A detailed assessment of potential and actual contaminated soils is provided in **Section 15.3.1** as part of the discussion on geology and soils.

Most of the site is shown on trigger maps produced by DNRM as being Strategic Cropping Land (SCL). The relevant SCL mapping for the site is shown on **Figure 5-2**, together with farm plans prepared by Salmec Harvesting who harvest cane on the site. Note that there are three active farms on the site, labelled as Farms 297, 620 and 621 on **Figure 5-2**.

Analysis of the SCL data reveals that of the 341 ha of the Aquis Resort parcel, 303 ha (89%) is mapped as likely SCL. Unmapped areas consist of the aquaculture ponds, remnant vegetation along the Yorkeys Creek and along the Richters Creek border, and some isolated small patches of remnant vegetation scattered throughout the parcel.

The SCL trigger mapping denotes areas where SCL is expected to exist (i.e. 'likely SCL') and therefore potential suitability for agriculture. In terms of actual agricultural use, information has also been provided on recent production (2007 to 2012) as summarised below. Farm numbers referred to in **Table 5-2** below are mapped on **Figure 5-2**.

TABLE 5-2 FARM AND PRODUCTION DETAILS (AVERAGE 2007 TO 2012)

FARM NO	AREA (ha)	AREA CUT (ha)	% UNDER CANE	TONNES CUT (t)	CCS (t / ha)
297	21.1	20.2	96%	1535.8	14.4
620	142.6	117.3	82%	8575.3	14.4
621	56.7	49.0	86%	3195.2	14.2
Total	220.4	186.6	85%	13306.3	

Source: Salmec Harvesting (M Savina pers. comm. 23 August 2013).

The above data shows that of the 302.7 ha mapped as likely SCL, an average of 186.6 ha (62%) has actually been farmed over the past six years. Some land previously cleared for cane has been abandoned.

There are several reasons for this difference in areas, namely:

- Some areas of remnant natural vegetation along the Richters Creek corridor have been mapped as SCL but are currently in their natural state.
- Some mapped areas were cleared for farming in the past but this use has been abandoned due to unsuitability (usually these areas are low-lying and are salt-affected). The mapped anthropogenic grasslands form part of this category and comprise 9% of the site area.
- Many other cleared areas, especially in the lower parts of the site, have been recolonised by natural vegetation and have been identified by the Department of Agriculture, Fisheries and Forestry (DAFF) as containing marine plants (protected under the *Fisheries Act 1994* (Qld)) of notable value). At a field inspection held by the terrestrial ecology specialist and a DAFF officer on 9 August 2013 (see **Appendix G**), DAFF advised that the following areas (cleared for cane and mapped as SCL) should, from DAFF's perspective, be mapped as marine plants (see below and **Photo 5-1**):

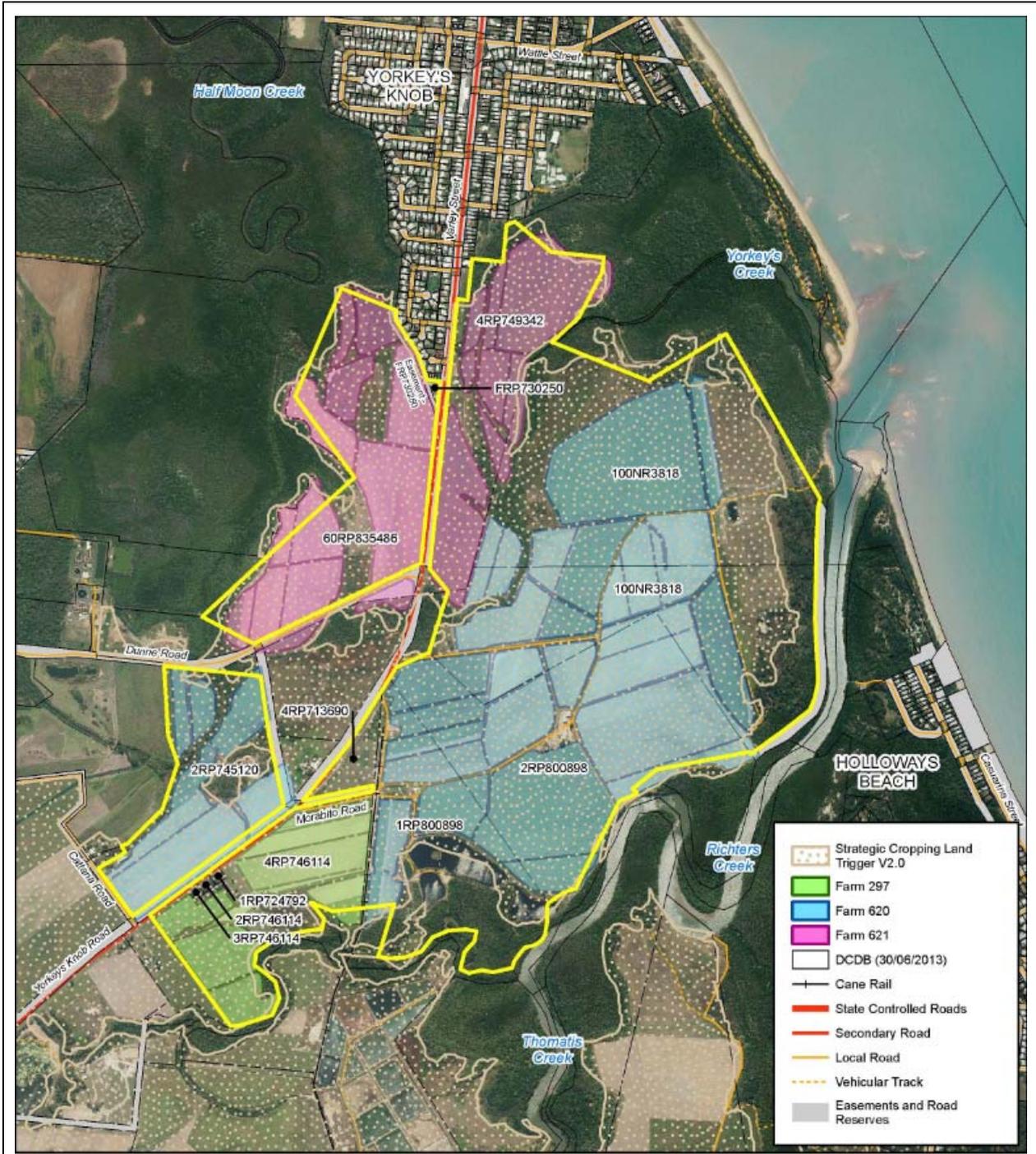


Figure 5-2 Mapped SCL Overlain by Farm Plans.

Source: Farm data from Salmech Harvesting (M Savina pers. comm. 23 August 2013). SCL data source as noted on map.

The north-western margin of Lot 100 NR3818 contains marine plants at the interface between forest and sugar cane. Numerous low-growing species extend from intact forest margins (mostly mangroves) right up to cultivated cane and in some areas marine couch (*Sporobolus virginicus*) extends into the cane crop.

There were also some artificial drains where marine plants have reached 75-100% cover. One of these drains extends from one side to the other of Lot 100 NR3818.

Other areas were observed where marine plant cover was patchy (<50% cover).

On Lot 60 RP835486 there is a large area dominated by regenerating marine plants in the north-western corner. This Lot also contains mangrove margins with an extensive frontage of low-growing marine plants abutting sugar cane.

DAFF advise that any clearing of these areas would require approval under the *Fisheries Act 1994* (Qld) and attract an offset if not mitigated. The restoration strategy described in **Chapter 7** (Flora and Fauna) identifies these areas as 'Marine Plants (retain if possible)'.

The above differences are not an unusual situation given that SCL mapping is based on a large scale assessment.

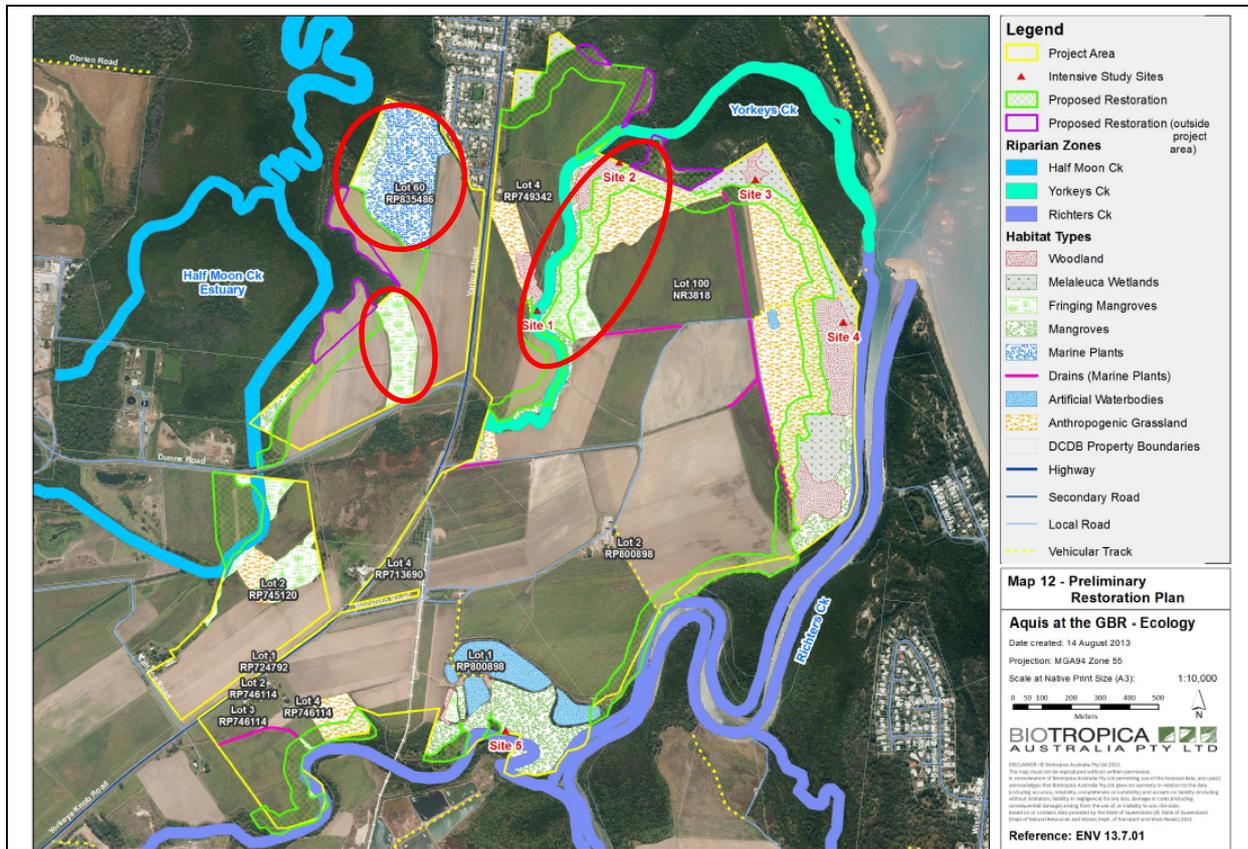


Figure 5-3 Marine Plants Mapped as SCL (red ellipses).

Source: Appendix G (Map 12).



Photo 5-1 Some Marine Plants Mapped as SCL on Lot 100 NR3818.

Source: Appendix G Plate 3.

5.2 ASSESSMENT OF LAND USE CHANGE

5.2.1 Planning Context

The existing urban structure of Cairns is the outcome of the community living with—and adapting to—constraints peculiar to the city, its suburbs, and its environs.

This summary of the history of development for greater Cairns provides important context for an assessment of:

- potential new development fronts/areas
- potential sites for major developments
- the competition for available land.

In addition, this history provides an important understanding of the way the physical and economic constraints have shaped the form of urban Cairns, and limited the strategic options for successive planning authorities.

a) Physical Constraints

From its earliest settlement, the physical constraints of the region have influenced directly the shape of the city and the development choices made by local and state governments.

The older part of the city, based on the suburbs of Cairns City, Cairns North, Parramatta Park, Westcourt and Manunda, were developed on a series of parallel sand ridges and freshwater wetlands; where the sand ridges were used for roads and the wetlands filled for housing. Remnants of these wetlands remain off Severin, Anderson, Little and Pease Streets and in the vicinity of Centenary Lakes.

The extent of filling was significant. Indeed that part of the CBD north and east of Spence Street and the Sea Port environs—including the suburb of Portsmouth to the south—were tidal, and have been comprehensively filled to facilitate development. The Esplanade park for its full length; the Esplanade Lagoon; the Hilton, Harbour Lights; Fogarty Park, the Pier and associated public car park; are all on reclaimed land.

The coastline, Trinity Inlet to the south and east of the CBD, the Barron River Delta and steep forested hillsides (Murray Prior Range to the east, Macalister and Bellenden Ker Ranges to the west), have constrained the available developable land significantly for all of Cairns' history.

Effectively there has been only sufficient space for one primary arterial road north, and one south.

The unmistakable linear form of the city was created by the physical boundaries flanking the coastal plain and reinforced by transport infrastructure and the urban development it supports.

b) Economic Constraints and Opportunities

Cairns' existence is owed primarily to its role as regional rail terminus and seaport, and the unintended consequence of a cyclone destroying Port Douglas as the service centre for Tropical North Queensland, including the Palmer and Hodgkinson gold fields.

With the advent of sugar cane as the region's primary industry, available land—both flood-prone and flood-free—across the coastal plain and into the lower slopes of the flanking ranges, was converted to cultivation. Very low areas uneconomical to fill (with the possible exception of East Trinity) remained as wetland.

Cane cultivation today extends from Mossman in the north through to Innisfail and beyond and is a dominant part of the landscape and regional economy. Mills processing cane in the region remain at Mossman, Gordonvale, Innisfail and Mareeba. Mills have closed at Edmonton (Hambledon) in Innisfail (Goondi) and Babinda as, amongst other factors, supply in their cane growing catchments reduced in line with redevelopment for urban purposes.

The upgrading of the Cairns International Airport in 1986 heralded major inbound tourism. In the 1980s alone 3000 beds were approved throughout the region, the majority in resort or multi-level developments.

Tourism became the region's biggest industry.

c) Development Consequences of the Constraints and Opportunities

The consequences of the physical constraints and changing economic climate on the evolution of Cairns are as relevant in 2014 as they were at the time of these observations:

- The original Cairns city was developed with a focus near its ports (air and sea), and the rail head. Major employment, services and facilities all were concentrated from the Barron River to the north through to Earlville, south of the CBD.
- From the 1970s to 2000, as the tourism industry rapidly grew, development 'jumped' both north, west and south, with an additional impetus in the north at Smithfield, and west at Brinsmead.

- Throughout this time, cane fields were converted to housing and other urban purposes including tourism, in a generally ad hoc manner. Cane growing was active in parts of the older suburbs of Cairns well into the 1990s, at the same time as new suburbs were developed in locations further removed from existing facilities than inner regional cane farms.
- With the 'jump' outwards in urban development areas, commercial facilities followed. Larger nodes of commerce initially developed at Smithfield and an expanded centre at Earlville, followed by Westcourt, Mount Sheridan and Redlynch.
- Tourist accommodation of any substance has concentrated in Cairns City, mainly the CBD and Cairns North, with highway-based facilities and other nodes spread throughout, principally from Trinity Beach north to Clifton Beach and Palm Cove. Whereas the Northern Beaches and Cairns North/CBD have been developed for a mix of permanent and visitor accommodation, development to the south has been primarily in standard housing subdivisions for permanent residents.
- A feature of Cairns city's suburbs is the high percentage of multi-unit housing.
- The CBD has remained strong and the regional centre of retail and commerce. The extent of visitor accommodation within the CBD is high.
- The airport has maintained good access north across the Barron River delta and south to the CBD.
- Community perceptions of development and the rate of development have, at times, been acute. Planning authorities' adoption of hillside protection policies, height controls, and the practice of separating tourism development from permanent residential areas, have all been influenced by community sentiment.
- Before statutory regional planning, there were studies in the 1980s and 1990s followed by successive regional plans that addressed development options and issues.

As a result of the constraints, there were always very few genuine options for development in the region, and this has resulted in competition for land between legitimate land uses. Good residential land is also good industrial land and during the Cairns Area Development Study (CADS) serious consideration was given to land known as Cannon's Farm for industrial development.

The loss of cane land has been an important consideration. CADS saw the southern corridor expansion as long-term, with a view to maintaining cane in production to support the Hambledon Mill.

Growth rates outstripped land availability by the time the 2010 non-statutory Regional Plan (pursuant to the *Integrated Planning Act 1997* (IPA)) was in force. It recommended development of Myola (near Kuranda), but it came with the need to upgrade the Kennedy Highway (Kuranda Range Road) which was found to be unaffordable. The subsequent Regional Plan advocated growth south from Edmonton into Mount Peter.

In contrast with other regional centres, including Townsville and Toowoomba—where regional growth options are numerous and of large capacity—and SEQ¹, which has similar and varied growth options, Cairns' form and shape is:

- directly influenced by the physical constraints
- reflective of a well-entrenched linear urban form which has only been reinforced by subsequent regional planning documents and plans
- represented by a particular outcome i.e. any new major development has involved fill or manipulation of the contours of heavily constrained land and/or the removal of land from active cultivation.

¹ Acknowledging this is of a much larger scale to Cairns.

At key stages of the city's growth, unplanned economic initiatives have occurred. These required adjustment to the accepted planning strategies, but understandably because of the net benefit such activities would create, the planning authorities managed and accepted the changes and the expected outcomes satisfactorily.

Examples include:

- The decision to locate the CRC's (CRC) administration centre on industrial land outside the traditional CBD.
- The unprecedented growth in international tourists by 1987 (including significant investment by Japanese entities and the backpacker phenomenon), leading to
 - a shortage of accommodation and changed development policies for hostels
 - competing demands for available residential land
 - conflicts between residential and permanent residential areas.
- James Cook University campus development on prime (and designated) residential land at Smithfield.
- The conversion of the Cairns Railway Station to a major department store-based shopping centre.
- The development of the Cairns Southern Access Road, initially as access for industry but which became the preferred southern commuter link.
- Growth in the Navy base which had both positive impacts (Fremantle-class patrol boat shipbuilding and economic flow-on) and negative impacts (loss of finite waterfront industrial land and shortage of single men's quarters).

d) *Key Context for the Assessment of the Aquis Resort Proposal*

With any planning assessment it is important to understand the context (physically, economically and socially) within which a proposed development will exist and, importantly, within which the decision of any application pertaining to that development is made.

This introductory section is considered to demonstrate these are the components of that context:

- Over the history of Cairns and its development, there have been very few options available for urban development.
- It was inevitable the linear form would evolve and dictate future strategic planning options.
- Development of constrained land is expected.
- Incremental loss of cane land and manipulation of physical constraints is similarly expected.
- Planning authorities have acknowledged that competition for land use options is high.
- Unexpected economic events heighten the acute shortage of unconstrained available urban land, and the history of development since 1980 suggests choices can be reasonably made and addressed.
- The tension between tourism development and permanent residential areas was a genuine concern in the region, which has abated as tourism precincts have consolidated.

Aquis Resort at The Great Barrier Reef (Aquis Resort) is the largest single development ever proposed for Cairns on the existing coastal plain.

It is significantly larger and more intense than the six examples referenced in the previous section. It represents something like the post-Japanese in-bound tourist impetus in one single application.

It is, by its scale and connection to the Chinese in-bound tourist market, a proposal of the type that could not have been reasonably anticipated by any planning instrument. It is on constrained land, particularly with respect to flooding and sea level rise, and will involve the loss of cane production.

However, that status, as history has shown, is not uncommon in what is, at times, a rapidly growing community and international tourism hub such as Cairns.

e) State Planning Policy

On 2 December 2013 the Queensland Government released its single State Planning Policy (SPP). The purpose of the policy is to establish a new approach to state planning in Queensland and clarify state interests in a single document.

The SPP 'defines the Queensland Government's policies about matters of state interest in land use planning and development' (State Development Assessment P Provisions (SDAP 22.11.13 v1.1)). These apply to the making or amending of a local planning instrument. SDAP also has application for certain types of development or developments in areas where the SPP has not yet been integrated into the relevant local planning scheme. CairnsPlan 2009 does not integrate the SPP.

Where the assessment manager for a development application is the Chief Executive of the Department of State Development Infrastructure and Planning (DSDIP) or another referral agency (as prescribed in SPA) SDAP apply to the consideration of state interests in the assessment of development. SDAP is not applied by local government.

Table 5-3 below illustrates the relationship between the state interests expressed in the SPP and the modules of the SDAP — showing where there is an intersect with a matter of interest to the state in the SDAP.

TABLE 5-3 INTERSECT BETWEEN SPP AND SDAP

THE SDAP MODULES	THE SPP STATE INTERESTS				
	Liveable Communities and Housing	Economic Growth	Environment and Heritage	Hazards and Safety	Infrastructure
1. Community amenity	✓				✓
2. Regional plans	✓	✓	✓		✓
3. Aquaculture		✓	✓		
4. Environmentally relevant activities			✓	✓	
5. Fisheries resources		✓	✓		
6. Strategic cropping land		✓	✓		
7. Water resources		✓	✓		
8. Native vegetation clearing	✓		✓		
9. Queensland heritage	✓		✓		

THE SDAP MODULES	THE SPP STATE INTERESTS				
	Liveable Communities and Housing	Economic Growth	Environment and Heritage	Hazards and Safety	Infrastructure
10. Coastal protection	✓	✓	✓		
11. Wetland protection and wild river areas			✓		
12. Contaminated land				✓	
13. Major hazards facility				✓	
14. Maritime safety				✓	✓
15. Airports	✓				✓
16. Particular dams				✓	✓
17. Public and active transport	✓				✓
18. State transport infrastructure protection					✓
19. State transport network functionality					✓

Each module of the SDAP is summarised below and a response provided against each item. The assessment provided is informed by technical studies and reports that comprise the EIS. Cross references are made to the respective EIS sections as appropriate.

MODULE 1: COMMUNITY AMENITY

1.1 Managing Noise and Vibration Impacts from Transport Corridors State Code

Purpose

- Protection of state transport operations and infrastructure.
- Protection of communities from impacts related to light and air.

Aquis Resort Response	
The site is located over 1.5 km from the nearest state controlled transport corridor.	
Conclusion	Does not apply

1.2 Managing Air and Lighting Impacts from Transport Corridors State Code

Purpose

- Protection of state transport operations and infrastructure.
- Protection of communities from impacts related to light and air.

Aquis Resort Response	
The site is located over 1.5 km from the nearest state controlled transport corridor.	
Conclusion	Does not apply

MODULE 2: REGIONAL PLANS

2.1 South East Queensland Regional Plan

Purpose

- To manage regional growth and change in the South East Queensland region.

Aquis Resort Response	
Not applicable	
Conclusion	Does not apply

MODULE 3: AQUACULTURE

3.1 Aquaculture State Code

Purpose

- Encourage ecologically sustainable industry and practices.
- Monitor and rehabilitate fishery sources and habits.
- Management of disturbances to fisheries resources or fish habitat.

Aquis Resort Response	
The proposed development does not involve aquaculture uses as defined under the Aquaculture State Code. The site is located adjacent to a recognised fish habitat (refer to comments under Module 5 – Fisheries Resources).	
Conclusion	Does not apply

MODULE 4: MODULE 4: ENVIRONMENTALLY RELEVANT ACTIVITIES

4.1 Concurrence Environmentally Relevant Activities State Code

Purpose

- Protect Queensland's environment while allowing development that improves quality of life.
- Continue to maintain ecological processes on which life depends (ESD).

Aquis Resort Response	
The environmentally relevant activities (ERAs) applicable to the project are identified in Section 4.2.10 . ERA 16 applies to extractive industry and screening activities. ERA 8 – storage of chemicals for construction, if thresholds for storage are exceeded as prescribed under the Environmental Protection Regulations March 2013 Module 4: Table 4.1.2 (PO1-PO5) and Table 4.1.3 (PO5-PO6) will apply.	
Site suitability	The environmental values of the site have been identified and the likely impacts outlined in Chapters 6 to 11 and 15 to 22 . An environmental management plan (refer to Chapter 23) will be prepared addressing methods of design and construction of the project that will prevent emissions of the site to adjacent areas.
Location of activity on the site	The location of the developed footprint and the inclusion of an extensive environmental management and conservation precinct allows for sufficient buffers to adjacent areas to protect environmental values and allow for the effective management of environmental impacts of the project. (Refer to Section 7.3.2 .)
Matters of state significance	The project adopts the principles of avoid, minimise, mitigate and offset where environmental impacts have been identified. Relevant matters of state significance have been identified and these principles applied. (Refer to Sections 7.1.4, 7.2.3 and 7.3.2 .)
Critical design requirements	Design of storage facilities for hazardous contaminants.
Conclusion	Consistent

MODULE 5: FISHERIES RESOURCES

5.1 Development in or Adjacent to a Declared Fish Habitat Area State Code

Purpose

- Ensure development in and adjacent to declared fish habitat areas is managed to support fish stocks and maintain the integrity, structure and fish habitat values of all fish habitat areas.

Aquis Resort Response	
The proposed development adjoins the Yorkeys Creek fish habitat area (FHA-034) – Area B and the Half Moon Creek fish habitat area (FHA-033) – Area B. There is a minor encroachment into the Yorkeys Creek FHA for the purposes of constructing lake water exchange infrastructure. Module 5 – Table 5.1.1 and Table 5.1.2 apply.	

(Continued over)

Performance Outcome	Aquis Resort Response
Table 5.1.1 All development within or adjoining a declared fish habitat area	
PO1 There is a demonstrated right to propose development in or adjoining the declared fish habitat area.	Tenure is held for the adjoining land and will be sought for access to the Richters Creek estuary for lake water exchange (prescribed tidal works). This infrastructure is a critical component of the project. (Refer to Section 11.3.1.)
PO2 Development adjoining a declared fish habitat area has regard to the habitat values of each declared fish habitat area.	The project will preserve 53 ha (99%) of natural vegetation on the site and restore a further 56 ha of dedicated ecological plantings. With respect to marine plants, 34 ha currently exists, less than 1 ha will be cleared, and nearly 30 ha will be restored. Attention is given to maintain and restoring connectivity and enhancements such as removing existing waterway barriers. (Refer to Section 7.2.2.)
Table 5.1.2 All development within a declared fish habitat area	
PO1 Development for a prescribed purpose in a declared fish habitat area, does not significantly impact on the natural condition of fish habitat and natural processes of the area.	The operational impact of the infrastructure has been demonstrated to be minor in terms of water quality and hydrology. A feasible construction methodology has been developed for in-stream works and the infrastructure route makes use of existing clearings. (Refer to Section 11.3.1.)
PO2 The development will not increase the risk of mortality, disease or injury, or compromise the health and productivity of fisheries resources.	The design of the inlet and outlet structures includes screens to preclude fish. Erosion in the mixing zone has been found to be unlikely and velocities will not create a barrier to fish movement. Water sensitive urban design (WSUD) strategies are included to ensure that stormwater drainage is of a high standard. (Refer to Section 11.2.1.) The project's environmental management plan will include controls over the use of herbicides. (Refer to Section 23.3.3.)
PO3 Development maintains or enhances community access to fisheries resources and fish habitats, such as through fishing access and linkages between the commercial fishery and infrastructure, services and facilities.	The location of the inlet/outlet pipes will not impede community access to Richters Creek for fishing or recreational purposes.
PO4 Development that has the potential to impact the operations and productivity of Queensland commercial or recreational fisheries mitigates any adverse impacts due to adjustment of fisheries.	There is no anticipated impact. (Refer to Section 7.2.11.)
PO5 – PO47	Not applicable
Conclusion	Consistent

5.2 Constructing or Raising Waterway Barrier Works in Fish Habitats State Code

Purpose

- Ensure development of waterway barrier works is designed and located to protect fish habitats.
- Ensure access for fish along waters and into key fish habitats is maintained and restored.
- Constructing or Raising Waterway Barrier Works in Fish Habitats State Code.

Aquis Resort Response

The project includes the removal of three waterway barriers (two tide gates and one undersized culvert) on the site and recommendations for removal of a further three waterway barriers (two tide gates and one undersized culvert) on adjacent land. This will result in net beneficial impacts to fisheries values by removing existing barriers to fish movement (Refer to **Section 7.2.2.**)

Conclusion

Consistent

5.3 Removal, Destruction or Damage of Marine Plants State Code

Purpose

- Protect marine plant communities that are fisheries resources.

Aquis Resort Response

Table 5.3.1 Operation work

Performance Outcome	Aquis Resort Response
PO1 Development avoids and protects fish habitats and fisheries resources.	The concept master plan shows there will be a buffer that consists of all existing natural vegetation plus a minimum of 60 m restoration plantings. Inside this is an additional buffer in the form of a golf course which will be drained to WSUD devices designed to reduce loads of sediments and nutrients. Modelling shows export of sediments and nutrients will be less when the site is under development than it is for the cane farm, by over 133 tonnes per year. (Refer to Section 11.2.1.)
PO2 There is a demonstrated right to propose development within or adjacent to the public fish habitats and fisheries resources.	The project is a coordinated project under the SDPWO Act. Tenure is held for the adjoining land and access to the Richters Creek estuary for lake water exchange (prescribed tidal works) will be sought. This infrastructure is a critical component of the project. (Refer to Section 11.3.1.)
PO3 There is an overriding functional requirement for the development or part of the development to be located on tidal lands.	The works are for the construction of infrastructure that is critical to the protection of water quality within the lake, which in turn is a critical flood mitigation solution. (Refer to Sections 11.3.1 and 9.2.1.)
PO4 Development maintains or enhances community access to fisheries resources and fish habitats, such as through fishing access and linkages between the commercial fishery and infrastructure, services and facilities.	The infrastructure does not impact on existing fishing infrastructure or access required by the fishing sector.

(Continued over)

Performance Outcome	Aquis Resort Response
PO5 Development that has the potential to impact on the operations and productivity of Queensland commercial or recreational fisheries mitigates any adverse impacts due to adjustment of fisheries.	The development will not have any significant effect on commercial or recreational fisheries. (Refer to Section 7.2.11)
PO6 The development will not increase the risk of mortality, disease or injury, or compromise the health and productivity of fisheries resources.	<p>The design of the inlet and outlet structures includes screens to preclude fish. Erosion in the mixing zone has been found to be unlikely and velocities will not create a barrier to fish movement. (Refer to Section 11.3.1.)</p> <p>WSUD strategies are included to ensure that stormwater drainage is of a high standard. (Refer to Section 11.2.1.)</p>
PO7 Development resulting in drainage or disturbance of acid sulphate soil is managed to prevent impacts on fisheries resources and fish habitats.	<p>Management of extensive ASS/PASS on-site is feasible and a strategy has been prepared based on proven techniques. This will either quarantine or treat all soils during earthworks based on a continuous monitoring, treatment, and validation program.</p> <p>A detailed ASSMP prepared in accordance with QASSIT guidelines will be required to supplement the EMP (Construction). (Refer to Section 15.4.3.)</p>
PO8 Development of, or adjacent to, fish habitats avoids the unnecessary loss, degradation or fragmentation of fish habitats and their values and the loss of fish movement.	<p>The overall project will be built above HAT. The lake has a top water level of 1.5 m AHD and is likely to contain fish whether or not these are actively introduced. The conceptual lake management plan includes a raft of provisions aimed at management (in particular the exclusion of fish from the lake inlet and a tilapia management plan). These are still at the conceptual level and will be developed as part of the site's EMP (Planning).</p> <p>The lake inlet and outlet structures in Richters Creek are designed to exclude fish and not create a barrier to fish movement. (Refer to Section 11.3.1.)</p>
PO9 – PO33	Not applicable
Conclusion	Consistent

MODULE 6: STRATEGIC CROPPING LAND

6.1 Particular development on Strategic Cropping Land State Code

Purpose

- Protect strategic cropping land from development that lead to permanent impacts or diminished productivity

Aquis Resort Response
<p>Analysis of the SCL data reveals that of the 341.74 ha of the Aquis Resort parcel, 302.7 ha (89%) is mapped as likely SCL. Unmapped areas consist of the aquaculture ponds, remnant vegetation along the borders of Yorkeys Creek and Richters Creek, and some isolated small patches of remnant vegetation scattered throughout the parcel (refer to Section 5.1 and Section 7.1.5.)</p> <p>Development will involve the loss of 302.7 ha of likely SCL as mapped (186.6 ha of which is currently farmed land).</p>

Table 6.1.2 Material Change of use with permanent impact	
Performance Outcomes	Aquis Resort Response
Development includes a footprint of more than 3000 square metres and will result in a permanent impact on strategic cropping land in the management area	
PO2 The development is for an overriding need and provides a public benefit or no other site is suitable for the particular purpose.	The development provides a public benefit in terms of employment, contribution to the local, regional, and state economy. The assessment of prudent and feasible alternatives reveals no other site is suitable for the purpose (refer to Section 2.3.2). Other feasible sites on the Barron River delta are also mapped as SCL.
PO3 The permanent impact on strategic cropping land from the development must be avoided to the greatest extent practicable or minimised wherever possible.	Avoidance and minimisation is not possible.
PO4 The area of permanently impacted land is identified and a mitigation value is determined.	Mitigation is required based on validated area. The proponent anticipates a condition that requires a mitigation payment be made for the area of validated SCL prior to the commencement of works on the site, and in accordance with the relevant SCL framework applicable at the time.
Conclusion	Conflict

MODULE 7: WATER RESOURCES

7.1 Sustainable Management of Water Resources State Code

Purpose

- Encourage the sustainable management of water resources

Aquis Resort Response	
Table 7.1.2 Operational work	
Performance Outcomes	Aquis Resort Response
PO1 Works do not adversely impact on the natural riverine ecosystem.	The works will have minimal impact on Richters Creek at the mouth (where water exchange infrastructure is required) and at a point approximately 2 km upstream (where a high level lake overflow is required.) Both locations have been selected to make use of existing clearings and minimal disturbance is proposed. Extensive rehabilitation will be undertaken around these works. The lake will convey natural over-bank flow during a flood event around the built form and back into Yorkeys Creek and Richters Creek where it naturally flows. (Refer to Section 10.1.2 .)
PO2 Works do not adversely impact other users' ability to access the resource.	The works will not affect any user's ability to access the resource.
PO3 Works do not adversely impact on the physical integrity of the watercourse.	The works will not affect the physical integrity of a watercourse. Changes will be made to over-bank flow paths only.

(Continued over)

Performance Outcomes	Aquis Resort Response
PO4 All works are located and constructed in a way that is consistent with any of the following plans or declarations to the extent they are relevant to the proposed development a water resource plan or a resource operations plan or a wild river declaration or a moratorium notice issued under the Water Act 2000.	This provision is not applicable (complies).
Artesian and sub-artesian water	
PO5 To regulate the impact on the integrity of the artesian or sub-artesian system, water bores deeper than 6 metres are constructed in accordance with the relevant standard as follows minimum construction requirements for water bores in Australia, National Water Commission, 2012, or minimum standards for the construction and reconditioning of water bores that intersect the sediments of artesian basins in Queensland, Department of Natural Resources and Mines, 2012.	No bores are proposed other than for groundwater monitoring.
PO6 To regulate the impact on the natural processes of the artesian or sub-artesian system, works maintain the natural ecosystem of the artesian or sub-artesian system.	The lake will be quarantined from groundwater. Modelling reveals that this will prevent any impact on adjacent natural vegetation and in particular groundwater dependent ecosystems.
PO7 To regulate the impact on the connectivity of artesian or sub-artesian waters to surface water, works are to minimise impact on connectivity between sub-artesian or artesian water and surface water.	The lake will be quarantined from groundwater. Modelling reveals that this will prevent any impact on local groundwater using feasible and proven solutions. A small area (around 60 ha) will exist within the quarantined area and will no longer be connected to local groundwater.
Overland flow	
PO8 Development ensures that the natural ecosystem processes and water quality of wetlands of ecological significance is maintained.	All works are located outside of wetlands of ecological significance. The stormwater drainage strategy is designed to improve current water quality by the use of WSUD principles. (Refer to Section 11.2.1.)
PO9 Works are located and constructed in a way that minimises adverse impacts on neighbouring properties.	All works have significant buffers to surrounding properties and all existing drainage lines will be maintained.
Conclusion	Consistent

7.2 Removal of Quarry Material State Code

Purpose

- Encourage the sustainable removal of quarry material and water resource management

Aquis Resort Response	
There is no quarry material within the meaning of the Water Act 2000 proposed to be removed from the site.	
Conclusion	Does not apply

MODULE 8: NATIVE VEGETATION CLEARING

8.1 Queensland Vegetation Management State Code

Purpose

- Regulate the clearing of native vegetation within Queensland to conserve remnant vegetation; conserve vegetation in declared areas, prevent land degradation, prevent loss of biodiversity; maintain ecological processes, manage environmental offsets of clearing, reduce greenhouse gas emissions and allow for sustainable land use

Aquis Resort Response	
The project is a coordinated project. Therefore Table 8.1.3 and Table 8.1.4 apply.	
Table 8.1.3 General	
Clearing to avoid and minimise impacts	
PO1 Clearing only occurs where the applicant has demonstrated that the development has first avoided, and then minimised the impacts of development.	The overwhelming majority of natural vegetation will be retained, and clearing is restricted to narrow corridors for linear infrastructure. Existing clearings have been selected (avoidance) and corridors limited (minimisation). (Refer to Section 7.2.2.)
Clearing on land where compliance or enforcement notice or offset exists	
PO2	Not applicable
No clearing of vegetation as a result of the material change of use or reconfiguration of a lot	
PO3 Clearing as a result of the material change of use or reconfiguration of a lot will not occur.	Refer to PO1. Minor clearing as described will need to take place using an 'avoid, minimise, and mitigate' approach. Mitigation involves the planting of 56 ha of ecological plantings including screening / buffers. (Refer to Section 7.2.2.)
Clearing that could already be done under an exemption	
PO4 All clearing is limited to clearing that could be done under an exemption for the purpose of the development (as prescribed under Schedule 24, Parts 1 and 2 of the Sustainable Planning Regulation 2009) prior to the material change of use application being approved.	A material change of use application will be required for the proposed development.

(Continued over)

Table 8.1.4: Public safety, relevant infrastructure and coordinated projects

Limits to clearing	
<p>PO1 Clearing is limited to the extent that is necessary for establishing a necessary fence, firebreak, road or vehicular track, or for constructing necessary built infrastructure, if there is no suitable alternative site for the fence, firebreak, road, track or infrastructure (relevant infrastructure) or as a natural and ordinary consequence of other assessable development for which a development approval as defined under the repealed Integrated Planning Act 1997 was given, or a development application as defined under that Act was made, before 16 May 2003 or to ensure public safety or for a coordinated project and any associated ancillary works—other than a coordinated project that involves high value agriculture clearing, or irrigated high value agriculture clearing.</p>	<p>Clearing is limited to the extent that is necessary for constructing necessary built infrastructure. While use will be made of existing tracks and cleared areas, some widening will be required. (Refer to Section 7.2.2.)</p>
Wetlands	
<p>PO2 Maintain the current extent of vegetation associated with any natural wetland to protect water quality by filtering sediments, nutrients and other pollutants, aquatic habitat, terrestrial habitat.</p>	<p>The overwhelming majority of natural vegetation (terrestrial and aquatic habitat) will be retained and reinforced by ecological plantings that will double the area of natural vegetation. The stormwater drainage strategy includes WSUD elements such as filter strips, biofilters, and natural filtration to reduce loads of sediments and nutrients. Modelling shows export of sediments and nutrients will be less when the site is under development than it is for the cane farm, by over 133 tonnes per year. (Refer to Section 11.2.1.)</p>
Watercourses	
<p>PO3 Maintain the current extent of vegetation associated with any watercourse to protect bank stability by protecting against bank erosion, water quality by filtering sediments, nutrients and other pollutants, aquatic habitat, terrestrial habitat.</p>	<p>All riparian vegetation will remain and be reinforced by at least 60 m in width. (Refer to Section 7.2.2.) The land is very flat and erosion is most unlikely.</p>
Connectivity (public safety and relevant infrastructure)	
<p>PO4 In consideration of vegetation on the subject lot(s) and in the landscape adjacent to the subject lot(s), vegetation is retained that is of sufficient size and configured in a way that maintains ecosystem functioning, remains in the landscape despite threatening processes.</p>	<p>The overwhelming majority of natural vegetation will be retained and reinforced by ecological plantings that will double the area of natural vegetation. The restoration works are designed to both enhance habitat values and protect and improve ecological function. This reverses a local trend where riparian connectivity is increasingly being reduced and habitats fragmented. (Refer to Section 7.2.2.)</p>

Connectivity (coordinated projects)	
PO5 In consideration of vegetation on the subject lot(s) and in the landscape adjacent to the subject lot(s), vegetation is retained that is of sufficient size and configured in a way that maintains ecosystem functioning, remains in the landscape despite threatening processes or where this is not reasonably possible, maintain the current extent of vegetation.	The concept master plan includes provision for protecting almost all natural vegetation on the site (with the exception of some small infrastructure crossings) but more importantly, the inclusion of 56 ha of new habitat and reinforcement of aquatic and terrestrial connectivity will reinforce important riparian corridors that ultimately connect the site with the WTWHA (i.e. via Richters Creek and Half Moon Creek). Improved connectivity between the Coral Sea and the Cattana Wetlands will be enhanced due to improvement in the quality and robustness of the Half Moon Creek and Yorkeys Creek corridors. (Refer to Section 7.2.2.)
Soil erosion	
PO6 Clearing does not result in mass movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding, any associated loss of chemical, physical or biological fertility — including, but not limited to water holding capacity, soil structure, organic matter, soil biology, and nutrients within or outside the lot(s) that are the subject of the application.	<p>The land is very flat and the soils are known to be not erosion prone. A feature of the project is that as a general principle, all land will be drained to the lake during the construction phase so that it can collect any runoff and thereby prevent export of sediments and pollutants to the adjacent environment. (Refer to Section 15.2.2.)</p> <p>The EMP (Construction) will include an erosion and sedimentation control plan. (Refer to Section 23.4.)</p>
Salinity	
PO7 Clearing does not contribute to land degradation through waterlogging, or the salinisation of groundwater, surface water or soil.	<p>With the exception of parts of the bank of Richters Creek, no significant active erosion areas were evident. In addition, other than acid sulphate soils that are dispersed throughout the site and small areas of contaminated land, the soils likely to be encountered do not have any particular management needs arising from wetness, susceptibility to erosion, depth, salinity, or other features. (Refer to Section 15.2.2.)</p> <p>The lake will be quarantined from groundwater. Modelling reveals that this will prevent any impact on adjacent natural vegetation including groundwater dependent ecosystems.</p>
Conserving endangered and of concern regional ecosystems	
PO8 Maintain the current extent of endangered regional ecosystems and of concern regional ecosystems.	<p>Detailed mapping of terrestrial ecosystems reveals the site contains regional ecosystems that are classified as <i>least concern</i> and <i>of concern</i>. There are no <i>endangered</i> regional ecosystems.</p> <p>The extent of all regional ecosystems on-site will be increased by plantings. (Refer to Section 7.2.2.)</p>
Essential habitat	
PO9 Maintain the current extent of essential habitat.	<p>EHP mapping shows most of the terrestrial ecosystems are also essential habitat (this is despite the fact the southern cassowary has not been observed on the site for many years).</p> <p>The extent of all site regional ecosystems (including those shown as essential habitat) will be increased. (Refer to Section 7.2.2.)</p>

(Continued over)

Acid sulphate soils	
PO10 Clearing activities do not result in disturbance of acid sulphate soils or changes to the hydrology of the location that will either aerate horizons containing iron sulfides or mobilise acid or metals.	Management of extensive ASS / PASS on-site is feasible and a strategy has been prepared based on proven techniques. This will either quarantine or treat all soils during earthworks based on a continuous monitoring, treatment, and validation program. A detailed ASSMP prepared in accordance with QASSIT guidelines will be required to supplement the EMP (Construction). (Refer to Section 23.4.)
Conclusion	Consistent

MODULE 9: QUEENSLAND HERITAGE

9.1 Queensland Heritage Place State Code

Purpose

- Ensure development of State heritage places and archaeological places is compatible with the long term conservation of these places.

Aquis Resort Response	
The subject land does not contain 'places' that are entered in the state heritage register. An Indigenous cultural heritage and non-Indigenous cultural heritage study has been prepared. (Refer to Section 21.1 and 21.2.)	
Conclusion	Does not apply

MODULE 10: COASTAL PROTECTION

10.1 Tidal Works, or Development in a Coastal Management District State Code

Purpose

- Ensure tidal works and development in the coastal management district is managed to protect and conserve environmental, social and economic coastal resources.
- Ensure works or development enhances resilience of coastal communities to coastal hazards.

Aquis Resort Response
The entire site other than Lot 2 RP 745120 is within a coastal management district (CMD). Hazards associated with locating buildings and structures within the coastal zone are well known and have been investigated in detail in Section 8.2.2 . The two main coastal processes affecting development in the coastal zone, namely coastal erosion (including changes to the mouth of Richters Creek), and river migration. Table 10.1.1 applies to all development and Table 10.1.2 applies to operational work.

(Continued over)

Table 10.1.1 All development	
Performance Outcomes	Aquis Resort Response
PO1 Development in a coastal hazard area is compatible with the level of severity of the coastal hazard.	<p>The development cannot be located outside the hazard area as the year 2100 tidal inundation area covers the entire site. However, the development meets the overall purpose of the code, and specific coastal hazards are addressed in subsequent POs and AOs.</p> <p>The development includes habitable design levels above 2100 HAT + SLR (2.66 m AHD) and Design Storm Tide Event (DSTE) (3.91 m AHD) levels and will be protected against wave attack.</p> <p>Design floor levels have been set at 7.5 m AHD (based on PMF).</p> <p>The 2100 HAT + SLR and the DSTE levels are both below the design floor and refuge levels. Wave protection during extreme storm surge events is being provided by the provision of a large buffer and structural design of the island revetment. (Refer to Section 8.2.2.)</p>
PO2 Development siting, layout and access in a coastal hazard area responds to potential inundation due to a defined storm tide event and minimises associated risks to personal safety and property.	<p>The development will comply with AO2.1 to AO2.4 in that design floor levels will be above predicted 2100 HAT + SLR and DSTE levels and will be protected against wave attack.</p> <p>Design floor levels have been set at 7.5m AHD which is above the PMF and DSTE.</p> <p>The predicted 2100 HAT level is 2.66 m AHD and the DSTE level is 3.91 m AHD which are both below the design floor and refuge levels.</p> <p>Note that the design flood level for the seaward end of the development is 3.55 m AHD and the development has been designed to pass this flood without impact to surrounding properties.</p> <p>Since the proposed development is 'downstream' of existing development at Holloways Beach and Yorkeys Knob during storm tide events, it is not expected to have an impact on these communities during storm tide events.</p>
	<p>Emergency provisions include all requirements for sheltering in place at 7.5 m AHD or above. (Refer to Section 12.4.1.)</p>
PO3 Development directly, indirectly and cumulatively avoids an unacceptable increase in the severity of the coastal hazard, and does not significantly increase the potential for damage on the premises or to other premises.	<p>Since the proposed development is 'downstream' of existing development at Holloways Beach and Yorkeys Knob during storm tide events, it is not expected to have an impact on these communities during storm tide events. (Refer to Section 12.4.2.)</p>
PO4 Development avoids the release of hazardous materials as a result of a natural hazard event.	<p>Design elements will ensure hazardous material will be stored above DSTE levels and are not at risk from floods etc. (Refer to Section 23.3.3.)</p>
PO5 Natural processes and the protective function of landforms and vegetation are maintained in coastal hazard areas.	<p>The proposed development is located on land previously used for sugar cane farming. However, the concept land use plan includes provision for protecting almost all the 53 ha of natural vegetation on the site (with the exception of some small infrastructure crossings) but more importantly, the inclusion of 56 ha of new habitat and reinforcement of aquatic and terrestrial connectivity will reinforce important riparian corridors that ultimately connect the site with the WTWHA (i.e. via Richters Creek and Half Moon Creek). Improved connectivity between the Coral Sea and the Cattana Wetlands will be enhanced due to improvement in the quality and robustness of the Half Moon Creek and Yorkeys Creek corridors. (Refer to Section 7.2.2.)</p>

PO5 (cont.)	<p>The development is set approximately 600 m landward of the current shoreline and as such is located well behind current coastal dunes. However, due to the low lying nature of the site, the predicted 2100 HAT + SLR level is located approximately 3.5 to 4 km inland and landward of the proposed development. The process for achieving this location during increasing sea level rise is impossible to predict given the array of tidal creeks in the region. However, it is likely the communities of Holloways Beach and Yorkeys Beach will be protected at an early stage due to their proximity to the sea. This protection will interrupt coastal processes in the region. In this circumstance, it is unlikely that the proposed development will impact on coastal processes. (Refer to Section 8.1.2.)</p>
PO6 Erosion prone areas in a coastal management district are maintained as development free buffers, or where permanent buildings or structures exist, coastal erosion risks are avoided or mitigated.	<p>The key hazard (2100 tidal inundation) covers the entire site and as such this PO is not strictly met. However, the hazard will/may not emerge for many decades. Nonetheless, as in PO1, the development meets the overall purpose of the code and the design of defences on the site will include climate change adaptation principles.</p> <p>Note the proposed development is located landward of the shoreline erosion prone area (not 2100 HAT), although the nominal 400 m does extend within the property boundary. In the event of shoreline recession, it is expected properties significantly seaward of the proposed development at Holloways Beach and Yorkeys Knob will be protected and this will interrupt coastal processes well before any influence of the proposed development.</p> <p>All infrastructure will be designed to accommodate flood flows and, as such, will be elevated above DSTE levels.</p>
PO7 Development avoids or minimises adverse impacts on coastal resources and their values, to the maximum extent reasonable.	<p>No beach nourishment and no marine infrastructure or dredging is proposed. The development is to be located on land previously used for sugar cane farming and the fringing natural vegetation will be essentially undisturbed and significantly enhanced. (Refer to Section 7.2.2.)</p>
PO8 Coastal protection work is undertaken only as a last resort where erosion presents an imminent threat to public safety or permanent structures.	<p>No coastal protection works are proposed.</p>
PO9 Development avoids adverse impacts on matters of state environmental significance, or where this is not reasonably possible, impacts are minimised and residual impacts are offset.	<p>There will be little to no impact on matters of SES and very minor impacts on the GBR Coast Marine Park and FHA due to lake infrastructure on/in Richters Creek. Extensive enhancement of biodiversity values is proposed to compensate for these impacts. (Refer to Section 7.2.2.)</p>
PO10 Development maintains or enhances general public access to or along the foreshore, unless this is contrary to the protection of coastal resources or public safety.	<p>The development is set approximately 600 m landward of the current shoreline and as such is located well away from areas used for public access. (Refer to Section 8.2.2.)</p>
PO11 Development avoids structures attaching to, or extending across, non-tidal state coastal land abutting tidal waters.	<p>With the exception of the lake water exchange infrastructure, all works will be on private land.</p>

(Continued over)

<p>PO12 Further development of canals, dry land marinas and artificial waterways avoids or minimises adverse impacts on coastal resources and their values, and does not contribute to degradation of water quality, an increase in the risk of flooding, degradation and loss of matters of state environmental significance (including, but not limited to, coastal wetlands, fish habitat areas and migratory species habitat).</p>	<p>DEHP has advised that the lake is considered to be an artificial waterway in terms of the <i>Coastal Protection and Management Act 1995</i>. The project concept avoids or minimises adverse impacts on coastal resources and their values, and does not contribute to degradation of water quality, an increase in the risk of flooding, degradation and loss of matters of state environmental significance (e.g. coastal wetlands, fish habitat areas, the GBR Coast Marine Park, and migratory species habitat). A risk assessment based on detailed modelling of water quality concludes the mitigated risk is negligible to low. Strict compliance criteria are proposed to apply to lake discharge. (Refer to Section 11.3.1).</p>
<p>PO13 Development does not involve reclamation of land below tidal water, other than for the purposes of coastal-dependent development, public marine development or community infrastructure, strategic ports, boat harbours or strategic airports and aviation facilities, in accordance with a statutory land use plan, where there is a demonstrated net benefit for the state or region and no feasible alternative exists, coastal protection work or work necessary to protect coastal resources or physical coastal processes.</p>	<p>There are no proposed reclamations.</p>
<p>Table 10.1.2: Operational work</p>	
<p>PO1 Tidal works that is private marine development does not result in adverse impacts to tidal land.</p>	<p>Not applicable.</p>
<p>PO2 Development does not result in the disposal of material dredged from an artificial waterway into coastal waters, with the exception of reclamation works or coastal protection works or the maintenance of an existing artificial waterway and the at-sea disposal of material that has previously been approved for the waterway.</p>	<p>Approximately 2.8 million m³ of sand will be excavated to form the lake using a combination of dry excavation and dredging. Because of the risk of encountering ASS/PASS, all excavated material will be processed on-site in accordance with the conceptual construction methodology. Only after treatment will beneficial use of the sand be considered and there are public infrastructure providers who have expressed an interest in this material. (Refer to Section 15.4.3.)</p>
<p>PO3 The design and construction of an artificial waterway maintains coastal landforms.</p>	<p>The existing dune system adjacent to the site will not be impacted and general over-bank flow paths through the site will be maintained. (Refer to Section 10.1.2.)</p>

(Continued over)

<p>PO4 Development that involves dredging includes and complies with a management plan that demonstrates how environmental impacts will be managed and mitigated, and how the requirements of the National Assessment Guidelines for Dredging, Australia Government Department of the Environment, Water, Heritage and the Arts, 2009 will be met.</p>	<p>See PO2. All dredging will be internal to the site and no discharge will occur off-site. (Refer to Section 4.2.4.)</p>
<p>Conclusion</p>	<p>Consistent</p>

MODULE 11: WETLAND AND WILD RIVERS

11.1 Wetland Protection Area State Code

Purpose

- Ensure development in wetland protection areas is planned, designed, constructed and operated to prevent the loss or degradation of wetland environmental values or enhances the values of wetlands in these areas.

Aquis Resort Response	
There are small areas of natural or artificial wetlands within the site (refer to Section 7.1.5.)	
Table 11.1.1 All development	
Performance Outcomes	Aquis Resort Response
<p>PO1 Development is not carried out in a wetland in a wetland protection area unless there is an overriding need in the public interest or the development is a development commitment or the development is for community infrastructure.</p>	<p>High conservation value wetlands under the <i>Environment Protection Act 1994</i> include estuarine, riverine, palustrine regional ecosystems, and a lacustrine waterbody. These are mapped in Section 7.1.5.</p> <p>The abandoned aquaculture ponds (mapped as wetlands) are proposed to be filled due to water quality and flooding impacts. This will also reduce bird strike impacts of the ponds. Other wetlands located adjacent to the creek will be included in the vegetation and conservation buffers. Overall, the development will not impact on the quality or function of the environmental wetlands. (Refer to Section 7.2.4.)</p>
<p>PO2 An adequate buffer to a wetland in a wetland protection area is provided and maintained.</p>	<p>A buffer to the wetlands within the site is provided by the existing vegetation, or proposed reinforcement of plantings along and adjacent to the eastern boundaries. The width of the buffer varies, but overall serves to support the ongoing environmental values and functioning of the wetlands. (Refer to Section 7.2.2.)</p>
Hydrology	
<p>PO3 The existing surface water hydrological regime of the wetland protection area (including the area of the wetland) is enhanced or maintained.</p>	<p>The abandoned aquaculture ponds (mapped as wetlands) are proposed to be filled to assist in mitigation overland flows associated with flooding and resultant water quality impacts. (Refer to Section 7.2.2.)</p>

(Continued over)

<p>PO4 The existing groundwater hydrological regime of the wetland protection area (including the area of the wetland) is enhanced or protected.</p>	<p>As above.</p>
<p>In an urban area</p>	
<p>PO5 During construction and operation of development in a wetland in a wetland protection area a wetland in a wetland protection area is not used for stormwater treatment, the buffer for and water quality values of a wetland in a wetland protection area are protected from stormwater impacts.</p>	<p>The proposed development is not located in an urban area.</p>
<p>Outside an urban area</p>	
<p>PO6 During construction and operation of development in a wetland protection area outside an urban area a wetland is not used for stormwater treatment, the buffer for and water quality values of a wetland are protected from stormwater impacts.</p>	<p>The EMP (Construction) will address the need to ensure the wetland areas of the site are protected from any measurable change to the quantity or quality of stormwater entering the wetland during construction or operation.</p>
<p>Ecological values</p>	
<p>PO7 Development involving the clearing of vegetation protects the biodiversity, ecological values and processes, and hydrological functioning of a wetland in wetland protection area, including water quality values, aquatic habitat values, terrestrial habitat values, usage of the site by native wetland fauna species or communities.</p>	<p>The concept master plan includes provision for protecting almost all natural vegetation on the site (with the exception of some small infrastructure crossings) but more importantly, the inclusion of 57 ha of new habitat and reinforcement of aquatic and terrestrial connectivity to reinforce important riparian corridors that ultimately connect the site with the WTWHA (i.e. via Richters Creek and Half Moon Creek).</p>
<p>PO8 Development avoids land degradation in a wetland protection area, including mass movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, wind erosion or scalding, loss or modification or chemical, physical or biological properties or functions of soils.</p>	<p>The EMP (Construction) will address the need to ensure that the wetland areas of the site are protected during construction.</p>

(Continued over)

<p>PO9 Development in a wetland protection area ensures that any existing ecological corridors are enhanced or protected, and have dimensions and characteristics that will effectively link habitats on or adjacent to the development, facilitate the effective movement of terrestrial and aquatic fauna accessing or using a wetland as habitat.</p>	<p>The overwhelming majority of natural vegetation will be retained and reinforced by ecological plantings that will double the area of natural vegetation. The restoration works are designed to both enhance habitat values and protect and improve ecological function. This reverses a local trend where riparian connectivity is increasingly being reduced and habitats fragmented. (Refer to Section 7.2.2.)</p>
<p>PO10 Development does not result in the introduction of non-native pest plants or animals that pose a risk to the ecological values and processes of a wetland in a wetland protection area.</p>	<p>The project will include a weed and pest management strategy to be implemented in the project's EMP (Construction) (Refer to Section 23.4.)</p>
<p>PO11 During construction and operation of development in a wetland protection area, wetland fauna are protected from impacts associated with noise, light or visual disturbance.</p>	<p>The project will include a fauna management strategy to be implemented in the project's EMP (Construction) (Refer to Section 23.4.)</p>
<p>PO12 During construction and operation of the development in a wetland protection area, ongoing management, maintenance and monitoring is undertaken to ensure adverse effects on hydrology, water quality and ecological processes of a wetland are avoided or minimised.</p>	<p>The project will include a comprehensive EMP (Construction) that addresses the protection of all wetland and other values and will include ongoing management, maintenance and monitoring (with pre-planned reactive strategies) to ensure that adverse effects on hydrology, water quality and ecological processes are avoided or minimised. (Refer to Section 23.4.)</p>
<p>PO13 Development in a wetland protection area in an urban area avoids adverse impacts on matters of state environmental significance, or where this is not reasonably possible, impacts are minimised and residual impacts are offset.</p>	<p>There will be little to no impact on matters of SES and very minor impacts on the state marine park, FHA and GBR Marine Park due to lake infrastructure on/in Richters Creek. Extensive enhancement of biodiversity values is proposed. (Refer to Section 7.2.2)</p>
<p>PO14 Acceptable circumstances for not fully achieving the policy outcome is development that provides for an overriding need in the public interest, is a development commitment, is for community infrastructure.</p>	<p>The proposal will achieve the performance criteria to the maximum extent practicable. The inclusion of 57 ha of new habitat and reinforcement of aquatic and terrestrial connectivity will reinforce important riparian corridors that ultimately connect the site with the World Heritage area.</p>
<p>Conclusion</p>	<p>Consistent</p>

11.2 Agricultural or Animal Husbandry Activities in a Wild River Area State Code

Purpose

- Ensure that any new or expanded agricultural activities and animal husbandry activities within a wild river preservation area occur in a way that preserves the river's natural values.

Aquis Resort Response	
The proposal is not located in a wild river area.	
Conclusion	Does not apply

11.3 Residential, Commercial and Industrial Development in a Wild River Area State Code

Purpose

- Ensure that any new or expanded residential, commercial or industrial development within a wild river area occurs in a way that preserves the wild river's natural values.

Aquis Resort Response	
The proposal is not located in a wild river area.	
Conclusion	Does not apply

MODULE 12: CONTAMINATED LAND

12.1 Contaminated Land State Code

Purpose

- Ensure that actually or potentially contaminated land is used in a way which is suitable for the site, and does not place another part of the environment, or human health, at risk.

Aquis Resort Response	
Table 12.1.1 Material change of use	
Performance Outcomes	Aquis Resort Response
PO1 Contaminated land is used in a way which is suitable for the site, and does not place another part of the environment, or human health, at risk.	The site history and field inspection do not identify volumes of chemical storage on any allotment that would constitute a 'notifiable activity' under Section 374 of the <i>Environmental Protection Act 1994</i> . The results of a search of the Queensland Government Environmental Management Register (EMR) and Contaminated Land Register (CLR) regarding the site are provided in Section 15.3.1 along with the status of listing on the EMR/CLR. While these potential contamination sources are typically surficial, they may have the potential to impact the shallow unconfined aquifer. Management of soils is an element of the proposed environment management plan (EMP Construction). (Refer to Section 23.4 .)
PO2 - unexploded ordnance (UXO)	Not applicable.
Conclusion	Consistent

MODULE 13: MAJOR HAZARD FACILITIES

13.1 Major Hazard Facilities State Code

Purpose

- Assess and minimise off-site risks associated with developments involving major hazard facilities or proposed major hazard facility.

Aquis Resort Response	
Not applicable	
Conclusion	Does not apply

MODULE 14: MARITIME SAFETY

14.1 Maritime Safety State Code

Purpose

- Ensure development supports the viable operation of navigation aids, the safe operation of vessels in navigable channels and supports equitable access to navigable waterways.

Aquis Resort Response	
The proposal accepts its position on the coast line. The project does not include any navigable access to the site. It is not envisaged that any interference with the operations of navigational aids will occur.	
Conclusion	Does not apply

MODULE 15: AIRPORTS

15.1 Airport Land Use Plans

Purpose

- Ensure that the Cairns Airport Land Use Plan 2012 can continue to provide economic opportunities regionally and Statewide.

Aquis Resort Response	
<p>During construction there will be in the order of a 0.5% increase to passenger volumes associated with additional movements by professional staff to the site. This increase can be accommodated by latent capacity on existing flights. Terminal, ground handling and landside facilities would not be affected.</p> <p>There is a net increase of 22% on aircraft movements into Cairns International Airport when Aquis Resort is operational. This is primarily driven by a doubling of international aircraft movements. Cairns Airport Limited has advised there is sufficient latent capacity with existing airside and landside infrastructure to cater for the increase in passengers and flights. Even with Aquis Resort flights international flight numbers are not expected to reach the 1987 peak.</p>	
Conclusion	Consistent

MODULE 16: PARTICULAR DAMS

16.1 Referable Dams State Code

Purpose:

- Ensure the safety and reliability of dams that have been failure impact assessed under the Water Supply Act 2008 and determined to be a referable dam.

Aquis Resort Response	
There are no referable dams on the subject site.	
Conclusion	Does not apply

MODULE 17: PUBLIC AND ACTIVE TRANSPORT

17.1 Public Passenger Transport State Code

Purpose:

- Ensure development supports the integration of land use with public passenger services and public passenger transport infrastructure.
- Promotes and maximises the use of public passenger transport as an attractive, efficient and accessible travel alternative to private transport in a way that reduces the overall economic, environmental and social costs of transport.
- Increases opportunities for people to access public passenger transport, including access by active transport.
- Provides, as far as practicable, public passenger transport infrastructure to support public passenger services.

Aquis Resort Response	
It should be noted the term 'high occupancy vehicles' (HOV) has been utilised throughout the EIS response as opposed to 'public transport'. The reason is the development will establish a privately run transport fleet of buses and coaches to service the staffing and guest transport needs, and will operate in tandem with existing public transport operations.	
Table 17.1.1: Material change of use	
Performance Measures	Aquis Resort Response
PO1 Development is designed and constructed to accommodate safe, convenient and efficient access for buses, bus stops and public passenger transport facilities.	<p>The development will create a broad spectrum of traffic demands across all modes during the construction and operation phases of the project. Transport infrastructure requirements are detailed in Section 4.3.1 and Section 24.5.3.</p> <p>The internal design of the development will accommodate a circulation network for cars, buses, coaches, limousines, high occupancy vehicles (HOV), and taxis. Upgrades to local and state transport networks will include the provision of bus stops and associated facilities in consultation with relevant state agencies.</p>

(Continued over)

PO2 Development does not adversely impact on the operation of existing or proposed public passenger services setdown, layover and boarding arrangements.	<p>Any upgrades or construction outside the development site will be undertaken in accordance with design standards specified by the respective asset owners and government agencies.</p> <p>The introduction of high occupancy vehicles for this development will ensure ongoing efficiency in the delivery of visitors and guests to the Resort.</p>
PO3 Development does not adversely impact on the efficiency of bus routes.	The design of the on-site movement network will not impact on the operation of existing bus routes along Yorkeys Knob Road, Dunne Road or the Captain Cook Highway.
PO4 Development supports public passenger service integration and intermodal transfer.	<p>The trip demands generated by the development will be significant in the context of the Cairns transport network. Trip demands include the following trip categories: resident guests checking in and out; resident guests leaving and returning on day trips; day visitors from other guest houses and Cairns locals; staff arriving and leaving for work; and back-of-house deliveries. The implementation of a dedicated HOV fleet for the transfer of guests will result in a significant reduction in the pressure on the public transport service. The development will provides direct linkages and ease of interchange for passengers between existing and future public passenger transport, including other transport modes.</p> <p>On-site facilities will be provided for safe and efficient bus and HOV parking and transfer of passengers. External to the site the proponent will seek to complement existing transit and bus stop facilities by contributions to upgrades.</p>
PO5 Development ensures buses can efficiently navigate through the proposed site.	On-site facilities will provide sufficient parking, turning and manoeuvring areas for buses and high occupancy vehicles at the numerous venues around the site (casino, hotels, golf course).
PO6 The development design allows for the progressive staging or extension of public passenger transport to the development.	External to the site the proponent will seek to complement existing transit and bus stop facilities by contributions to upgrades.
Public transport accessibility for users	
PO7 Development provides safe and convenient access to existing and future public passenger transport, public passenger transport facilities.	The site layout will include safe and convenient facilities for all visitors and staff to access the numerous venues within and outside the development. Bus set down, bus stops and portes cochere will provide undercover and convenient access.
PO8 Development provides for the on-site set down of private coaches, buses and minibuses to meet the anticipated capacity of the proposed development.	The development has the capacity to accommodate manoeuvring and set down facilities for the largest design vehicle to be accommodated across the site (refer to Section 4.3.1 and Section 24.5.2.)
Taxi facilities	
PO9 A dedicated taxi facility is provided to meet the anticipated need of the proposed development, and is located to provide convenient, safe and equitable access for all patrons seeking to use this transport service.	Dedicated taxi, limousine, coach, HOVs and shuttle bus parking and set down areas will be included throughout the development as part of the internal transport network.
Conclusion	Consistent

17.2 Active Transport State Code

Purpose

- Ensure development supports active transport (cycling, walking).
- Provides infrastructure to support active transport, as far as practicable.

Aquis Resort Response	
Table 17.2.1: Material change of use	
Performance Outcomes	Aquis Resort Response
Pedestrian and cycle access	
PO1 Development supports active transport by providing a safe, convenient and legible pedestrian and cycle network.	<p>There will be a strong pedestrian and cycling linkage between Aquis Resort and Yorkeys knob and to a lesser extent to the Northern Beaches and the remainder of the Cairns urban area.</p> <p>A suitable off-road shared facility is proposed to be constructed to provide safe and functional movements of bicycles and pedestrians between Yorkeys Knob and the development with the upgrades of Yorkeys Knob and Dunne Road, including the provision of a high standard on/off cyclist and pedestrian lane/facilities. (Refer Section 24.6.3.)</p> <p>End of trip facilities will be provided at Aquis comprising of secure storage, showering and change facilities for staff. (Refer to Section 24.6.3.)</p>
Existing and future active transport infrastructure and corridors	
PO2 Development does not impact on the safe and efficient operation of existing active transport infrastructure where co-located with an existing state transport corridor.	Pathways along Yorkeys Knob and Dunne Roads will connect with existing cycling and pedestrian facilities currently provided on the Captain Cook Highway. The pathways and facilities on the trunk infrastructure road network will require upgrade in conjunction with proposed road upgrades. (Refer to Section 24.6.3.)
PO3 Development makes provision for future active transport infrastructure where it is a planned upgrade and co-located with an existing state transport corridor.	The location and connection of existing and future pathways will be planned and designed in liaison with CRC and DTMR during the design of the development. Active transport corridors will be kept clear of any encumbrances including permanent buildings, structures and improvements above or below ground. (Refer to Section 24.6.3.)
Critical cycle corridors on the principal cycle network	
PO4 Development protects or makes provision for critical cycle corridors and provides the part of a planned upgrade to a critical cycle corridor that adjoins or is contained within the development.	CairnsPlan 2009 identifies Yorkeys Knob and Dunne Roads as district level routes for the cycling and pedestrian network. A strategic corridor is also identified from the site to north of Holloways Beach. Aquis Resort creates the opportunity to implement some components of this strategic planning for the Northern Beaches. (Refer to Section 24.6.3.)
Conclusion	Consistent

MODULE 18: STATE TRANSPORT INFRASTRUCTURE PROTECTION

18.1 Building and Structures State Code

Purpose

- Ensure that development located in, over or adjacent to existing or future state transport corridors or state transport infrastructure avoid or mitigate any adverse impacts on the operation and structural integrity of state transport infrastructure.

Aquis Resort Response	
<p>The site is located 1.5 km from state transport infrastructure and state transport corridors. Therefore the state code does not strictly apply to the project. However, significant upgrades to Yorkeys Knob Road and Dunne Road (which connect to the state transport corridor) are proposed together with the 'bring-forward' of intersection upgrades with the Captain Cook Highway, due to the demands on the trunk road network. (Refer to Section 4.3.1 and Section 24.1.3.) It is proposed to enter into an Infrastructure Agreement with CRC and DTMR. The agreement will provide the framework through which the assessment of impacts, responses and the funding mechanism will be agreed. (Refer to Section 24.1.3.)</p>	
Conclusion	Does not apply

18.2 Filling and Excavation State Code

Purpose:

- Ensure filling and excavation associated with development does not create adverse impacts on the condition or operation of an existing or future state transport corridor.

Aquis Resort Response	
<p>The site is located 1.5 km from state transport infrastructure and state transport corridors. Therefore the state code does not strictly apply to the project. However, there is a significant transport task associated with the movement of construction and earthworks materials to and from site which will create impact on the state road network. Impacts are primarily associated with accelerated deterioration of pavements on the state road network. The proposed Infrastructure Agreement will recognise the impacts and a mechanism for responding to the impacts. An outline of the impacts is discussed in Section 24.1.2).</p>	
Conclusion	Does not apply

18.3 Stormwater and Drainage Impact on State Transport Infrastructure State Code

Purpose:

- Ensure that stormwater events, including peak discharges, flood levels, frequency/duration of flooding, flow velocities, water quality, sedimentation and scour effects associated with development are minimised and managed to avoid creating any adverse impacts on a state transport corridor.

Aquis Resort Response	
<p>The site is located 1.5 km from state transport infrastructure and state transport corridors. Therefore the state code does not strictly apply to the project. However, significant upgrades to Yorkeys Knob Road and Dunne Road (which connect to the state transport corridor) are proposed together with the 'bring-forward' of intersection upgrades with the Captain Cook Highway due to the demands on the trunk road network. These works will include provision of significant cross drainage upgrade. (Refer to Section 24.1.3.) Flood modelling has been undertaken for the proposed development to demonstrate potential unmitigated impacts and responses such that there will be no impacts on State Transport Infrastructure (refer to Sections 9.2.1 and 9.3.1).</p>	
Conclusion	Does not apply

MODULE 19: STATE TRANSPORT NETWORK FUNCTIONALITY

19.1 Access to State-Controlled Roads State Code

Purpose:

- Ensure development does not adversely impact on the safety, function and operational efficiency of a state-controlled road or a future state-controlled road.

Aquis Resort Response	
<p>The site is located 1.5 km from state transport infrastructure and state transport corridors. Significant upgrades to Yorkeys Knob Road and Dunne Road (which connect to the state transport corridor) are proposed together with the 'bring-forward' of intersection upgrades with the Captain Cook Highway due to the demands on the trunk road network. The operation of the Aquis Resort will create impact at the point of connection to the state road network. The Captain Cook Highway between Caravonica Roundabout and Macgregor Road Roundabout and the Cairns Western Arterial Road between Freshwater Creek Bridge and the Captain Cook Highway currently require upgrade. Implementation of the planned upgrade will mitigate the impacts on the State Road Network by Aquis. An Infrastructure Agreement is proposed as a means of recognising the impacts and mechanism for responding to the impacts and cost sharing. (Refer to Section 24.1.3.)</p>	
Table 19.1.1: All development	
Performance Outcomes	Aquis Resort Response
Location of the direct vehicular access to the state-controlled road	
<p>PO1 Any road access location to the state-controlled road from adjacent land does not compromise the safety and efficiency of the state-controlled road.</p>	<p>The development site will not have direct access onto a state controlled road. Connection to Captain Cook Highway will be obtained via the Yorkeys Knob Road which will be upgrade to four lane divided standard. The intersection at the connection of Yorkeys Knob Road and the Cairns Western Arterial Road with the Captain Cook Highway will require upgrading. The shape and form of these changes cannot be established at this time as there is currently a planning underway for the Smithfield Bypass and this will significantly influence the functional requirements of these intersections. (Refer to Section 24.1.3).</p>

Direct access to a limited access road	
PO2 Access to a limited access road is in accordance with the approved limited access policy.	The development will not have direct access onto the state controlled road network
Number of road accesses to the state-controlled road	
PO3 The number of road access locations to the state-controlled road maintains the safety and efficiency of the state-controlled road.	The development does not increase the number of road access locations to the Captain Cook Highway or the Cairns Western Arterial Road.
PO4 The number of road access locations to the state-controlled road is rationalised to maintain the safety and efficiency of the state-controlled road.	The development does not increase the number of road access locations to the Captain Cook Highway or the Cairns Western Arterial Road.
Design vehicle and traffic volume	
PO5 Any road access location maintains the safety and efficiency of the state-controlled road.	The connection of the upgraded Yorkeys Knob Road to the Captain Cook Highway will be configured to maintain the safety and efficiency of the Captain Cook Highway. The configuration of the intersection cannot be derived until the outcomes of the Smithfield Bypass Business Case Planning Study are completed by DTMR). (Refer to Section 24.1.3.)
Internal and external manoeuvring associated with direct vehicular access to the state-controlled road	
PO6 Turning movements for vehicles entering and exiting the premises via the road access location maintain the safety and efficiency of the state-controlled road.	The development does not involve any direct vehicular access to a state controlled road. Yorkeys Knob and Dunne Road local roads provide the direct vehicular access to the site. The Yorkeys Knob Road intersection with the Captain Cook Highway will be designed to reflect the traffic volume and design vehicle minimum requirements to ensure that safety and efficiency of the state controlled road network is maintained. (Refer to Section 24.1.3.)
PO7 On-site circulation is suitably designed to accommodate the design vehicle associated with the proposed land use, in order to ensure that there is no impact on the safety and efficiency of the state-controlled road.	An on-site movement network will be designed to make provision for on-site vehicular manoeuvring, parking, safe and convenient pedestrian and cycle movements, delivery and back-of-house requirements, wet weather convenience (where appropriate) and connectivity to the local and state controlled road networks (refer to Section 24.1.3.) Internal road design will ensure the flow of traffic onto the local and the state-controlled road is not impeded by traffic queuing beyond the confines of the site.
Temporary vehicular road access location to the state-controlled road	
PO8 Any proposed temporary road access locations ensure that the safety and efficiency of the state-controlled road is maintained.	There are no temporary road accesses proposed to the state controlled road.
Vehicular access to local roads within 100 metres of an intersection with a state-controlled road	
PO9 Development having road access to a local road within 100 metres of an intersection with a state-controlled road maintains the safety and efficiency of the state-controlled road.	The access points to Yorkeys Knob Road to the development are located some 1.5 km+ from the intersection of the Captain Cook Highway.
Conclusion	Consistent

19.2 Development Adjacent to Railway, Bus Way and Light Rail State Code

Purpose:

- Ensure any development within 25 metres of an existing, future railway, bus way or light rail does not adversely affect the safety and operational integrity.

Aquis Resort Response	
The proposed development is not within 25 m of an existing or future railway, bus way or light rail.	
Conclusion	Does not apply

19.3 Transport Infrastructure and Network Design State Code

Purpose

- Development does not compromise safety and efficient management of state transport infrastructure and transport networks.
- Development does not compromise planned upgrades of state transport infrastructure or the development of future state transport corridors.
- Development does not compromise the safe and efficient operation of the road hierarchy by imposing traffic loadings on state-controlled roads which could be accommodated on the local road networks.
- Upgrade works proposed to mitigate adverse impacts of development on the operation and management of state transport infrastructure are consistent with applicable design standards and consistent with planned upgrades of the state transport infrastructure.
- Development does not compromise the safe and efficient operation of the overall road hierarchy by imposing traffic loadings on state-controlled roads which could be accommodated on the local road network.

Aquis Resort Response	
Table 19.3.1: All development	
Performance Outcomes	Aquis Resort Response
All state transport infrastructure — except state-controlled roads	
PO1 Development does not compromise the safe and efficient management or operation of state transport infrastructure or transport networks.	Detailed impact assessments have been conducted for the Captain Cook Highway and Cairns Western Arterial Road and a strategic level assessment of impacts on the broader Cairns regional road network was undertaken using the current EMME2 Cairns Strategic Transit Model to establish the breadth of impacts the development may create. To ensure ongoing functionality and safety of the road network a suite of upgrades is proposed as a result of the Aquis Resort development. The actual scope and extent of the upgrades will be defined through mechanisms defined by a proposed Infrastructure Agreement to be agreed with DTMR which will rely upon. Refer to Section 24.1.2 and 24.1.3 for details of possible road network solutions.

(Continued over)

<p>PO2 Development does not compromise planned upgrades to state transport infrastructure or the development of future state transport infrastructure in future state transport corridors.</p>	<p>The site is situated greater than 1.5 km from the nearest existing state road corridor at the Captain Cook Highway and is similarly separated from the proposed Smithfield Bypass, hence the proximity of the site does not impact on existing or planned transport infrastructure.</p> <p>Anticipated upgrades of the Captain Cook Highway with the Smithfield Bypass and the four laning of the existing two lane section of the Cairns Western Arterial Road is complementary to and mitigates the impacts arising from the Aquis resort.</p> <p>The proposed development accommodates planned upgrades to adjacent state transport infrastructure in the state transport corridor. The scale of the development and likely traffic movements generated result in the need to 'bring forward' the planning of the Cairns transport network. The proponent is working with DTMR on the detailed solutions for the trunk network upgrades and will contribute its proportionate share of the cost for those upgrades. This will be captured within a proposed Infrastructure Agreement to be agreed with DTMR. (Refer to Section 24.1.2 and 24.1.3.)</p>
<p>State-controlled roads</p>	
<p>PO3 Development does not compromise the safe and efficient management or operation of state-controlled roads.</p>	<p>Refer to comments above.</p>
<p>PO4 Development does not compromise planned upgrades of the state-controlled road network or delivery of future state-controlled roads.</p>	<p>Refer to comments above.</p>
<p>PO5 Upgrade works on, or associated with, the state-controlled road network are undertaken in accordance with applicable standards.</p>	<p>Refer to comments above.</p>
<p>PO6 Development does not impose traffic loadings on the state-controlled road network which could be accommodated on the local road network.</p>	<p>State and local road upgrades proposed as part of the development are consistent with the road hierarchy adopted in the Cairns Transport Network Report (DTMR and CRC).</p>
<p>Conclusion</p>	<p>Consistent</p>

5.2.2 FNQ Regional Plan

Figure 5-4 shows the extent of area covered by the Far North Queensland Regional Plan (FNQRP) 2009-2031. The regional plan applies to the local government areas of CRC, Tablelands Regional Council, Cassowary Coast Regional Council, Yarrabah Aboriginal Council, and Wujal Wujal Aboriginal Council as they were at the time when the Regional Plan was produced.

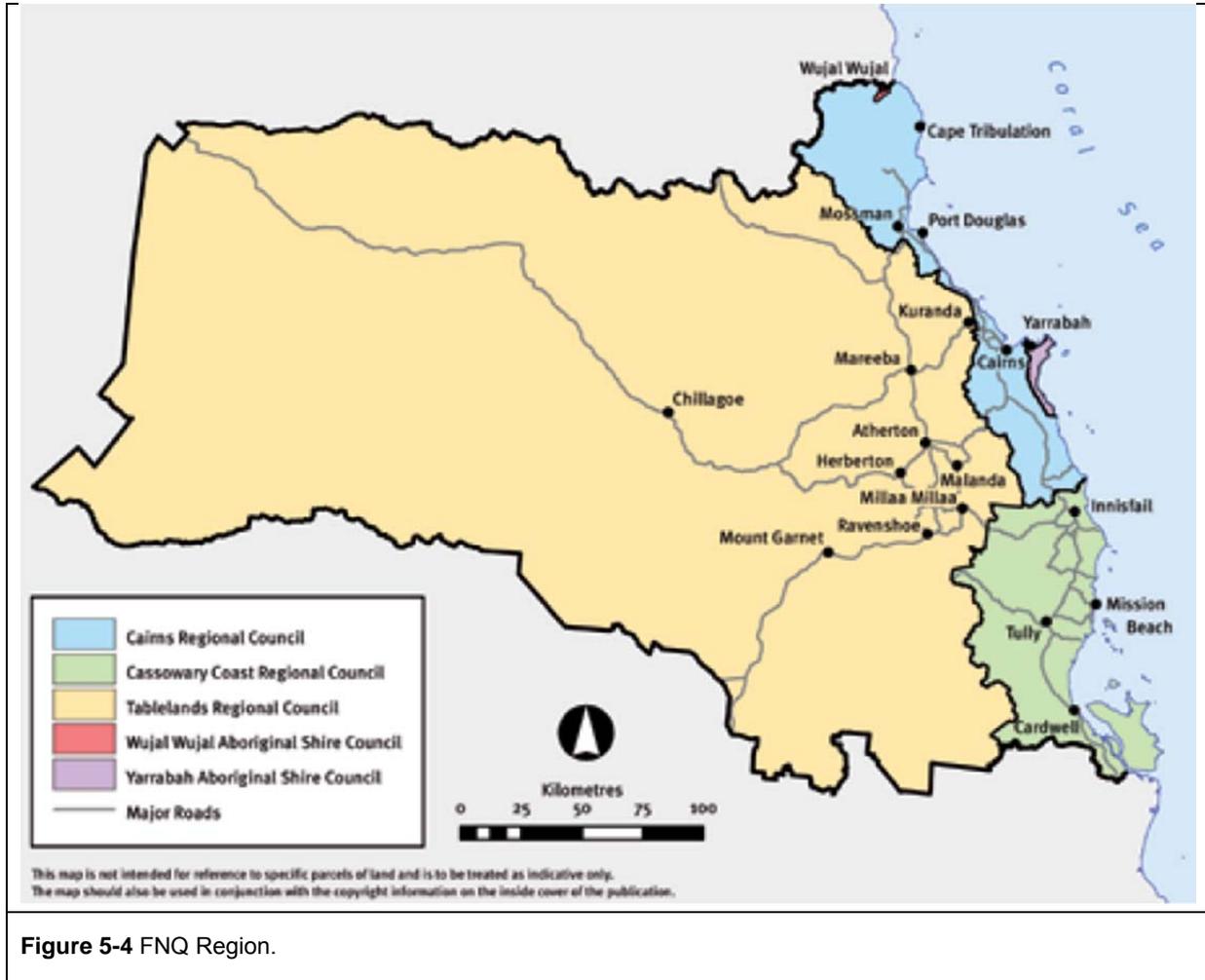


Figure 5-4 FNQ Region.

Where relevant, this assessment draws on findings of the EIS and in particular the detailed working papers and technical assessments.

The FNQ Regional Plan has region-wide outcomes, the assessment against which, at that scale, may not have direct relevance to the site or its locality.

VISION

The Regional vision for Tropical North Queensland is for stronger, more liveable and sustainable community, where:

The region's outstanding biodiversity and stunning landscape features are valued and protected.

Aquis Resort Response	
<p>The proposal is responsive to and compatible with the values applying to its context. The FNQ Regional Plan places significant weight on the importance of the hill slopes as a backdrop to the coastal lowlands (refer Part D and Part E (section 2.3) of the Regional Plan) in defining the overriding landscape vision for the region. The proposal does not impact on this backdrop.</p> <p>The scenic amenity assessment addresses the impact of the proposal on the scenic values of the Barron River delta, within its context in the Cairns scenic rim. The assessment finds that while the site is a significant marker within the Barron River delta, the overall contribution the delta makes to the landscape vision for the region is not diminished by the proposed development.</p>	
Conclusion	Consistent: regional landscape not diminished
	Inconsistent: change of rural to urban land use

Residents of Far North Queensland have a strong sense of community and feel safe, happy, healthy and able to enjoy a relaxed tropical lifestyle in a range of settings from urban to rural. The region continues to grow in prosperity and attracts national and international residents and visitors who seek a variety of lifestyle, employment, investment and holiday choices.

Aquis Resort Response	
<p>Aquis Resort provides an extraordinary economic impetus to the region, improving regional prosperity through job creation and general economic multipliers. The pattern of development in the region where permanent living areas and the centres that support them have been planned for some time is not compromised by the development in this locality. The site sits within the Cairns urban footprint, close to the nominated activity centre of Smithfield, and within 10 minutes of the Cairns CBD.</p>	
Conclusion	Consistent

The economy is vibrant, robust and diverse, firmly based on the principles of ecologically sustainable development.

Aquis Resort Response

In practical terms, the application of ESD to the Aquis Resort development involves the following:

- dealing with uncertainty in available information in accordance with the precautionary principle
- protection of terrestrial and aquatic habitats, species, and ecological processes to the greatest extent possible and where practical, the enhancement of these values
- protection of the values of surface water and groundwater and where practical, the enhancement of these values
- the wise use of natural resources, especially the use of any soil to be removed for beach replenishment and other beneficial uses
- a raft of sustainability initiatives to reduce energy consumption, conserve water, reduce waste, and re-use materials where possible
- vegetation screening and other strategies to limit visual impacts
- protection of Indigenous and non-Indigenous cultural heritage values
- interpretation and education programs to present natural and cultural values.

Areas where the development will require unavoidable impacts that are contrary to the principles of ESD are:

- alienation of strategic cropping land (i.e. a natural resource)
- the quality of the (rural) landscape (while some mitigation is possible, the project will involve a fundamental change in land use)
- the consumption of a range of services to be provided by government agencies and CRC
- the net production of greenhouse gases by virtue of construction, operation and overseas air travel.

These are unavoidable consequences inherent in the fourth guiding principle, namely 'the need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection'. The fact that the Aquis Resort development will make possible substantial enhancements to ecological values and nutrient export, demonstrates the application of this principle.

Conclusion

Consistent

Cairns forms the heart of an efficient and sustainable settlement pattern that protects natural, cultural and agricultural values, addresses the need to reduce greenhouse gas emissions and is supported by high level infrastructure, facilities and services.

Aquis Resort Response	
<p>Aquis Resort is the largest tourism development ever proposed in Queensland. It will cement the role of Cairns as the heart of the urban settlement pattern for Tropical North Queensland. Importantly, the site is well placed in the urban fabric of Cairns, to promote an efficient and sustainable settlement pattern. The proposed site is the most centrally located to the airport, local tourist attractions, higher order shopping facilities, the harbour, the CBD and essential infrastructure, when compared to other options. The site is well-placed within the settlement pattern of Cairns to achieve the Regional Plan's vision for consolidated infrastructure, facilities and services, and a reduction in greenhouse gas emissions.</p> <p>The proposal's protection of natural and cultural values is consistent with the principles of ESD. The overwhelming majority of natural vegetation will be retained and reinforced by ecological plantings that will double the area of natural vegetation. The restoration works are designed to both enhance habitat values and protect and improve ecological function. This reverses a local trend where riparian connectivity is increasingly being reduced and habitats fragmented. (Refer to Section 7.2.2.)</p> <p>The project will unavoidably alienate mapped SCL and mitigation will be required in accordance with the SCL Act (Refer to Section 5.1.)</p>	
Conclusion	Inconsistent (protection of agricultural values)

The Traditional Owners of the region and their cultural values are acknowledged and respected.

Aquis Resort Response	
<p>A cultural heritage study has been prepared as part of this EIS (refer to Section 21.1.) A cultural heritage management plan (CHMP) has been commenced (refer to Section 21.1.)</p> <p>There is no current registered Aboriginal party or Aboriginal cultural heritage body in relation to the lands or waters within the site. Public notice of the proponent's intention to prepare the CHMP resulted in only one interest being registered – the Yirrganydji Aboriginal group. The CHMP is progressing and will comply with Part 7 of the ACH Act.</p>	
Conclusion	Consistent

People are well educated, well informed and resilient to the anticipated impacts of climate change and oil vulnerability.

Aquis Resort Response	
No education program has yet been contemplated.	
Conclusion	Does not apply

STRATEGIC DIRECTIONS

Planning for climate change and oil vulnerability.

Aquis Resort Response	
<p>Consideration has been given to the effect on coastal process and flooding of expected SLR due to the greenhouse effect. SLR predictions by the Intergovernmental Panel on Climate Change (2007) for the mid-case scenario have been adopted for the project, i.e. :</p> <ul style="list-style-type: none"> • 0.4 m for 2060 (50 years) • 0.8 m for 2100 (100 years). <p>No allowance was made for changes in rainfall and rainfall intensity due to climate change. However, a conservative approach was taken to setting habitable floor and refuge levels. (Refer to Section 12.4.1.)</p>	
Conclusion	Consistent

- Protecting regional landscape and rural production values.

Aquis Resort Response	
<p>The site will be transformed from a rural setting to a highly developed urban setting with a consequential change of existing amenity. The envelope of large buildings will be visible from a number of current vantage points around the city and from arriving and departing aircraft. In general it is not possible to mitigate this impact due to the intensity of the proposed development and the height of the current building envelopes. Screening will be effective to some extent, especially when there is a large distance between the viewer and the structures, and the screening vegetation is close to the viewer (e.g. along Yorkeys Knob Road and Yorkeys Knob Beach). (Refer to Section 6.2.3.)</p> <p>Aquis Resort involves a change from a rural land use (cane farming) to an urban land use (tourism). This involves the reduction of productive agricultural land. Specifically, it will involve the loss of 303 ha of mapped SCL. Land suitable for agriculture is a finite resource and the Aquis Resort site currently produces about 13 000 tonnes of sugar cane per year from approximately 190 ha of farmed land. The balance of the mapped SCL is not farmed for a number of reasons. (Refer to Section 5.1.)</p>	
Conclusion	Inconsistent – rural production values

Urban consolidation and land use efficiency.

Aquis Resort Response	
<p>The Aquis Resort site is located outside the adopted urban footprint for the Cairns region due to its pre-existing environmental values and use as an agricultural cane farm. However, from a broader strategic overview of the urban area of Cairns the site is located between two urban/suburban areas of Cairns, namely the Northern Beaches and the Cairns CBD. This presents a significant opportunity to strengthen the connection between these two activity centres and consolidate growth within a more efficient urban footprint into the future. The resulting upgrades to services, transport and infrastructure provides that the consequential population growth, employment and business opportunities within that more consolidated area will benefit from the site's location.</p>	
	
Conclusion	Consistent

Integrating land use planning with infrastructure planning.

Aquis Resort Response	
<p>The Aquis Resort project has not been anticipated by the FNQ Regional Plan. However, this large scale project highlights the integration of land use and infrastructure planning at a regional and local level. The project recognises the significant scale of infrastructure upgrades required as a consequence of its construction and operation and the 'bring forward' of strategic planning for the consequential population growth generated by the development. Ongoing consultation and discussion with state agencies and CRC will occur throughout the construction and operational phases of the project. Collaborative partnerships will be needed across land use, infrastructure, and service provision to respond to the rate of growth anticipated. The EIS sets out the proponent's commitments including a number of strategies to mitigate likely positive and negative impacts of the development. These include strategic land use planning, workforce and training, human services, local participation and ongoing engagement.</p>	
Conclusion	Consistent

Maintaining connectivity.

Aquis Resort Response	
<p>Connectivity that makes up the existing and planned trunk infrastructure networks area addressed in Section 24.1.1 and Sections 25.1.1, 25.2.1, and 25.3.1. Aquis Resort brings forward the long term planning already established for the Cairns transport and services network. For state road infrastructure the focus is on the Captain Cook Highway and the Cairns Western Arterial Road and for local road networks. Yorkeys Knob Road and Dunne Road will require upgrading to four lanes to ensure ongoing connectivity for communities to the state controlled network. Active transport modes (walking and cycling) will also be designed to provide enhanced opportunities to and from the development site.</p> <p>The trunk water network will be connected by a dedicated water main between the development site and distribution mains in the Captain Cook Highway and waste water will be connected to the Marlin Coast Waste Water Treatment Plant via a dedicated rising main.</p> <p>Electricity connectivity will be achieved by the development of a new sub-station on Macgregor Road, Smithfield which had already been planned for by Ergon and telecommunications connectivity will rely upon the rollout of the NBN through to Yorkeys Knob.</p> <p>The overwhelming majority of natural vegetation will be retained and reinforced by ecological plantings that will double the area of natural vegetation. The restoration works are designed to both enhance habitat values and protect and improve ecological function. This reverses a local trend where riparian connectivity is increasingly being reduced and habitats fragmented. (Refer to Section 7.2.2.)</p>	
Conclusion	Consistent

Promoting a dynamic, robust and diversified economy.

Aquis Resort Response	
<p>Aquis Resort represents a massive capital investment in Cairns and regional economy. The development of an international standard integrated resort opens the regional economy to the burgeoning Chinese middle class travel market. Regional entry into the integrated resort market represents the opportunity to provide 'new product' to a new market. The construction and operation of an Integrated resort on the scale proposed will provide opportunities for the provision of goods and services from existing local and regional suppliers, as well as providing for growth in the regional economy for new suppliers and providers of services. The demand for skills and labour during construction and when operating will provide significant employment and population growth with consequential opportunities for the housing, development and construction industries and their various supply chains.</p> <p>Although Aquis Resort represents a substantial increase in the supply of tourism accommodation it also provides the opportunity for increased demand for existing tourism products including rainforest and reef visitation. Consequential population growth will stimulate demand across all sectors of the economy.</p> <p>The substantial increase in visitation numbers to Cairns and the region can lead to the flattening of the peaks and troughs of the market, resulting in more resilience and stability for existing operators.</p> <p>The capital investment as well as the import of tourism expenditure from a new market will contribute to a more dynamic and robust regional economy and opportunities for diversified goods and services to an expanded visitor and resident population.</p>	
Conclusion	Consistent

Limiting growth pressures on the coast.

Aquis Resort Response	
<p>This direction refers to urban opportunities and housing options in coastal locations. Aquis Resort is a tourism project. There is no permanent residential development proposed. However, it is an urban development that changes the land use from rural to urban and it is located in a coastal location that is vulnerable to a range of natural hazards such as sea level rise, storm tide inundation, flooding and cyclones.</p> <p>Residential growth that is generated as a consequence of this project will be accommodated within the local and regional planning strategies of CRC and the state government.</p>	
Conclusion	Consistent

Planning for emergency situations.

Aquis Resort Response	
<p>The site is exposed to a number of natural hazards, the most important of which are tsunami, elevated water levels and high winds associated with tropical cyclones, and Barron River flooding. Of some but lesser risk are coastal erosion and river migration.</p> <p>Whilst recognising this hazard exposure presents constraints to the development, it is also the reason why the various parcels that comprise the site are still undeveloped. As the preliminary design work undertaken to inform this EIS has shown, the site is large enough and the project sufficiently well-resourced to enable these constraints to be overcome. Specifically, the design has given attention to :</p> <ul style="list-style-type: none"> • design water levels for a suite of AEPs ('normal' to 'rare') • a decision on the response to 'rare' events (i.e. shelter in place rather than evacuate) • selection of associated design floor levels • provision of infrastructure and systems to cope with the selected response (or perhaps a combination of the two) • contribution to the development of external infrastructure • the development of an integrated emergency management plan to cover all eventualities. <p>(Refer to Section 12.5.)</p>	
Conclusion	Consistent

Maintaining and enhancing the tropical character through land use planning and innovative design.

Aquis Resort Response
<p>The built form for Aquis Resort will meet the architectural vision established for the project:</p> <ul style="list-style-type: none"> • The site for the Aquis Resort has the unique distinction of being positioned between two World Heritage sites: the Great Barrier Reef and the Wet Tropics Rainforest • The Australian Aboriginal people and the Torres Straits Islanders have been living in harmony with nature for over 40 000 years and it is that desire to be in harmony with nature that will drive the design of Aquis Resort • The Aquis Resort design team, through the EIS process, has gained a thorough understanding of the environmental context of the resort and, when developing the built form, will take its inspiration from the natural elements of the area. The development will respond sympathetically to the many layers of natural forces affecting the site: <ul style="list-style-type: none"> - Consideration will be given to the orientation and shape of the buildings to maximise solar benefits. - Landscape forms will be empathetically modelled to facilitate the flow of water through the flood plain. - The buildings will be carefully positioned and shaped to allow natural ventilation through the site. - The buildings will be positioned and oriented to capture the most valuable views of the reef and rainforest. • The Aquis Resort design team will integrate these environmental forces into a three dimensional model, which will sculpt the buildings from nature and embody the concept of 'tropical urbanism'. <p style="text-align: right;">(Continued over)</p>

- The form of the architecture must be distinctive and uniquely recognisable, with a strong identity that will attract visitors from around the world. The design will take its cues from its context, and the architectural form will resonate with its surroundings and reinforce the identity of rainforest and reef. The infinite variety of forms, colours and materials found in nature will inform the design of the development at every level. This will also allow a variety of experiences in the resort, creating points of difference between the various hotel products, which will encourage repeat visitors to the resort.

Conclusion
Consistent
Facilitating growth in Mount Peter.
Aquis Resort Response

The Mount Peter area is recognised as the major greenfield area for future population growth of Cairns. It is estimated that some 50,000 new residents will be accommodated there. **Section 14.1** provides a social profile of the Cairns region. It highlights that the Aquis Resort development will generate a 'bring forward' of population growth by up to 12 years. The planning and construction of the Mount Peter area will be stimulated by this growth and CRC will need to continue its planning for land releases to accommodate anticipated growth. The Queensland Government's strategic assessment of the coastal zone (**Section 22.5.3**) shows that the Mt Peter solution is expected to provide net benefits when compared with the existing land use in the area. See also **Section 22.17.9** regarding population growth.

While it is anticipated a substantial proportion of the construction and operational workforce will seek accommodation in areas in reasonable proximity to the site (Yorkeys Knob, Smithfield, Northern Beaches, Caravonica, North Cairns, Stratford, Freshwater, Brinsmead and Redlynch), the population growth as a consequence of the employment opportunities generated (55 000 direct and indirect) will need to be accommodated. The 'bring forward' of population growth must necessarily bring forward the development within the planned growth corridor for Cairns (Mount Peter).

Conclusion
Consistent
Achieving employment self-containment.
Aquis Resort Response

Aquis Resort will result in 20 000 direct employment opportunities when fully operational. The provision of 20 000 additional employment opportunities on the Northern Beaches as well as direct connectivity through the upgrade of Dunne Road and connectivity to the Northern Beaches inter-suburban connector will provide for a level of employment self-containment not currently enjoyed by other areas of the city outside the CBD.

Smithfield is identified as a major regional activity centre which will provide a wide range of goods and services not only to the resort but also to the expanded Northern Beaches resident population, which will also contribute to increased employment and higher degree of self-containment, and less reliance on the CBD as an employment centre.

Conclusion
Consistent

REGIONAL LAND USE PLAN

The population of FNQ is projected to increase by nearly 100 000 people over the next 20 years. Various urban settlements will grow as a result, with increasing demand for urban services and infrastructure. Growth will need to be carefully managed to maximise land use and infrastructure efficiency, address demographic changes and protect the region's unique landscape and rural production values.

Population Trends (including, Population growth, Aboriginal and Torres Strait Islander population, Non-resident population, Age distribution, Household size, Residential land supply, Implications of growth for the region and Preferred pattern of development)

Cairns focus:

- vibrant, tropical regional city of Cairns forms the urban heart of FNQ
- has the largest population in the region and plays a vital role in servicing the needs of the broader FNQ community
- tourist destination of international significance
- provides a landing point for visitors attracted by the region's superlative and diverse natural environment.

Aquis Resort Response

The Aquis Resort development is the largest tourism project ever proposed in Queensland. It will cement the role of Cairns as the heart of the urban settlement pattern for Tropical North Queensland. When fully operational in 2020, the population of Cairns directly attributed to this project, will have grown by approximately 50 000 people.

Cairns focus

- To ease increasing traffic congestion, Cairns requires well integrated transport options that provide attractive alternatives to private car travel.
- As the last city on the Bruce Highway supply chain, Cairns is dependent on an efficient transport network to support continued growth in the economy.

Aquis Resort Response

The development proposes to establish a privately run transport fleet of buses and coaches to service the staffing and guest transport needs and operate in tandem with existing public transport operations (termed 'high occupancy vehicle' (HOV) fleet). This is a mitigation measure to reduce the amount of traffic to and from the development in peak hour times (shift changes, major events) and to augment the existing public transport system operation in and around Cairns. It is anticipated that the development will also generate significant demand for taxis, limousines, tourist buses, coaches as well as active transport modes (cycling and walking).

REGIONAL POLICIES

NATURAL ENVIRONMENT

Biodiversity conservation

Protect, manage and enhance the extent, diversity, condition and connectivity of the region's natural areas to maintain ecological integrity and processes, reverse biodiversity decline and increase resilience to the expected impacts of climate change.

Aquis Resort Response	
<p>The assessment of site values referred to, identified regional priorities mapped in the FNQ Regional Plan 2009-2031 and these have been protected by the development.</p> <p>The Concept Land Use Plan includes provision for protecting almost all natural vegetation on the site (with the exception of some small infrastructure crossings) but more importantly, the inclusion of 61 ha of new habitat and reinforcement of aquatic and terrestrial connectivity will reinforce important riparian corridors that ultimately connect the site with the WTWHA (i.e. via Richters Creek and Half Moon Creek). Improved connectivity between the Coral Sea and the Cattana Wetlands will be enhanced due to improvement in the quality and robustness of the Half Moon Creek and Yorkeys Creek corridors. (Refer to Section 7.2.2.)</p>	
Conclusion	Consistent

Coastal management

- The region's natural coastal resources, including the foreshore, coastal wetlands, marine ecosystems and dunes are protected, managed and are able to accommodate the impacts of climate change.
- The coast is managed to allow for natural fluctuations—including any that occur as a result of climate change and sea level rise—and to protect human life and property from the hazards of storm tide inundation or shoreline erosion.

Aquis Resort Response	
<p>With the exception of minor infrastructure in Richters Creek and a very small amount of associated clearing, the natural values of the coastal zone will remain untouched. Substantial restoration of on-site areas will occur and the stormwater drainage strategy will actually reduce the export of sediment and nutrients when compared with current rates.</p> <p>Detailed assessment has been undertaken into coastal zone hazards and the relevant mitigation solutions are:</p> <ul style="list-style-type: none"> • flooding – recommendations for final fill levels above the Barron River Probable Maximum Flood (PMF) level, made possible by the construction of the lake to act as a compensatory waterway to mitigate external flooding impacts (this level is higher than that required by cyclone criteria) • cyclone (including storm surge) – recommendations for final fill levels above the 1% AEP storm tide with safe refuge above the 0.01% AEP level (higher levels are required by flooding criteria) • shoreline erosion and river migration – recommendations for armouring works at an eroded location on Richters Creek to protect Aquis Resort infrastructure • tsunami – no special recommendations (levels determined by flooding are higher than required by tsunami). 	
Conclusion	Consistent

Air and acoustic environment protection

- Development is located and managed to maintain or enhance air and the acoustic environment to maintain the health and wellbeing of the community and the natural environment.

Aquis Resort Response	
<p>In terms of air quality, vegetated buffers are included to reduce export of air emissions to adjacent properties. Other operation phase emissions are able to be mitigated and managed. Likely air emissions will occur due to construction but substantial buffers exist. Air quality will be managed via the EMP (Construction). There will be large and unavoidable greenhouse gas emissions that will be mitigated on-site as much as possible. However, there will still be a large net CO₂ production. Green building technology will be adopted to limit this. (Refer to Section 16.2.3.)</p> <p>In terms of noise, there will be minor noise impacts from the development although these are remote from sensitive receivers and management is proposed to reduce nuisance. There will be likely noise emissions from construction but substantial buffers exist. Construction noise will be managed via the EMP (Construction). (Refer to Section 23.4.)</p>	
Conclusion	Consistent

REGIONAL LANDSCAPE AND NATURAL RESOURCES

Regional landscape values

- The region's landscape values are identified, protected and managed through an integrated planning approach.

Aquis Resort Response	
<p>This section highlights the importance of the region's natural areas in terms of biodiversity, productivity, and relevantly to the subject proposal, scenic amenity. This in turn is important for tourism and, in some instances, the region's cultural heritage. The FNQRP places significant weight on the importance of the hillsides and the contrast between the coastal plain and the hillside backdrop as the major contributor to the regional landscape values, more so than river systems and features like the Barron River delta and Trinity Inlet. The objective, policies and strategies of 2.1 all promote a consistent recognition of the region's landscape values in land use planning and development assessment.</p> <p>The loss of rural character will mainly impact at the local level, from ground-level views, such as driving along Yorkeys Knob Road. Although it will be visible from lookouts and from Skyrail, this will be at a distance of approximately 6 km and in the context of the mosaic of different land uses and changing patterns of the Barron River delta. The regional landscape values of the forested hills abutting the narrow coastal plain will not be affected. (Refer to Section 6.2.3.)</p>	
Conclusion	Consistent

Natural resource management

- The economic, environmental, tourism, social and cultural values and functions of the region's natural resources are recognised, valued and managed to achieve ecological sustainability and resilience to climate change.

Aquis Resort Response	
<p>With the exception of resulting in the loss of over 300 ha of mapped SCL (the loss of productive cane land is only 62% of this), other aspects for natural resources are benefited by protection of essentially all of the existing natural vegetation (53 ha), restoration of a further 56 ha of ecological plantings, reinforcement of internal riparian corridors, removal of waterway barriers, weed management, and reduction of export of sediments and nutrients. These initiatives will enhance fisheries values of the adjacent FHAs and contribute to greater biodiversity. Despite on-site sequestration commitments, greenhouse gas emissions will increase by virtue of construction and operation of the Aquis Resort and associated overseas air travel.</p> <p>The development takes an adaption approach to climate change, as it allows for the currently recommended sea level rise predictions of 0.8 m by 2100 in setting floor levels and allowing for coastal erosion.</p>	
Conclusion	Consistent: regional values and functions
	Inconsistent: loss of strategic cropping land

Scenic amenity, outdoor recreation and inter-urban breaks

- The visual amenity of the region's natural landscapes, seascapes and productive rural lands is protected and enhanced.
- The region's tropical outdoor lifestyle is valued, protected and managed to provide a range of experiences which enhance liveability.

Aquis Resort Response	
<p>The FNQ Regional Plan places significant weight on the importance of the hill slopes as a backdrop to the coastal lowlands (refer Part D and Part E of the Regional Plan) in defining the overriding scenic amenity values for the site and the region.</p> <p>The development will change the character of the local Yorkeys Knob area from a mosaic of rural cane fields, wetlands, beach and residential suburb, to an area dominated by the built form and activity of a major resort complex. However, the retention and reinforcement of the vegetated fringes and riparian corridors, together with design and management of wide landscaped buffers and other ecological restoration, will soften the interfaces. While the international resort character will be confined to the site, with appropriate transitions to rural character beyond the site, there is little doubt the visual character of land uses in the Yorkeys Knob area will change rapidly and the rural character will be displaced locally. However, the regional landscape values of the forested hills abutting the narrow coastal plain will not be affected. (Refer to Section 6.2.1.)</p> <p>In addition to scenic amenity, the Regional Plan also demands recognition of the region's tropical outdoor lifestyle. It is submitted that the development proposed is entirely in keeping with this vision for the region through its design elements, outdoor features, and golf course, all in a setting of fringing natural vegetation and associated restoration.</p>	
Conclusion	Consistent

Primary production and Fisheries

- Good quality agricultural land is identified and protected for on-going and future agricultural production.
- The region's forestry resources are identified, and sustainably managed to maximise benefits to the community.
- The region's fishery resources and fish habitats are identified, and sustainably managed to maximise benefits to the community.

Aquis Resort Response	
The development will alienate over 300 ha of mapped SCL (62% of which is farmed) and this loss cannot be avoided or minimised. Mitigation is proposed as allowed for under the SCL Act. Forestry resources will not be affected. Fisheries values in the adjacent creeks and estuaries can expect to benefit by protection and enhancement of on-site habitat, reinforcement of internal riparian corridors, removal of waterway barriers, and reduction of export of sediments and nutrients. (Refer to Section 7.2.2.)	
Conclusion	Consistent: protection and enhancement of fisheries habitat
	Inconsistent: loss of primary production land

Extractive industries and mineral resources

Extractive industries and mineral resources, and associated transport routes and buffers are:

- identified
- protected for potential future extraction
- managed to minimise the impacts on environmental values.

Aquis Resort Response	
N/A	
Conclusion	Does not apply

Rural subdivision

- The region's rural production areas and natural resources are protected by limiting land fragmentation.

Aquis Resort Response	
N/A	
Conclusion	Does not apply

Rural precincts

- Rural precincts achieve regionally significant economic, environmental and social gains.

Aquis Resort Response	
N/A	
Conclusion	Does not apply

STRONG COMMUNITIES

Social planning

- The social needs of the community are appropriately considered in planning and development processes to maintain and enhance quality of life.

Aquis Resort Response	
<p>A social impact assessment (SIA) was prepared as part of the preparation of the EIS for this project. It was required to comply with the Office of the Coordinator-General's Social Impact Assessment Guideline released in July 2013 (Appendix P). Further, a consultation program was undertaken (Appendix O) which involves an extensive program of communication and stakeholder engagement to establish the likely positive and negative impacts of the project. The results of the SIA provided the foundation for the development of a mitigation plans to address the impacts identified, focussing on the needs of the Cairns region to respond to the consequential population growth anticipated as a result of the construction and operational phases of the project. The plans are:</p> <ul style="list-style-type: none"> • community engagement • workforce development and management • local content • construction management • strategic change management • community services and facilities • housing and accommodation • cultural development • community health and safety • responsible gaming. 	
Conclusion	Consistent

Social infrastructure

- The current and future needs of the community are met through coordinated and sequential provision of appropriate social infrastructure.

Aquis Resort Response	
<p>The projected population growth for the Cairns region will require the planning and provision of appropriate social and human services infrastructure and programs to serve the existing and future population. This should be undertaken in parallel to the land use (town planning) identified as a mitigation strategy in the SIA. The SIA report identifies a number of strategies that will require a collaborative partnership approach by the proponent, government agencies, local organisations and the community to ensure practical solutions and outcomes are achieved on an ongoing basis. The development will provide a number of opportunities for new sporting, art and cultural activities across the site, together with facilities that promote health and well-being (golf course, cycling and walking). Gaming is an existing community issue that will require ongoing monitoring and management strategies.</p>	
Conclusion	Consistent

Healthy and safe communities

- Communities are well designed, safe and healthy.
- Local environments encourage active community participation and healthy lifestyles and prevent crime.

Aquis Resort Response

The Aquis Resort SIA findings acknowledge law and order is an ongoing issue for the Cairns community, but one that cannot be measured or accurately predicted for this specific site. The Queensland Police Service was consulted during the preparation of the EIS and it is recognised that additional services will be needed as the population grows across the region. Embedding law and order services within the design of the development is one possible solution. A review of law and order needs is one of the mitigation strategies to be developed post land use approval. It will be an iterative matter to be addressed during the construction and operational phases of the project.

Safer by Design and *Crime Prevention Through Environmental Design (CPTED)* concepts across the development site will assist with the early recognition of 'hot spots' and possible solutions for the safety of residents and visitors.

Conclusion

Consistent

Community engagement and capacity building

- Engage the community and build community capacity through the planning and development of future communities.

Aquis Resort Response

The EIS process has included significant public engagement. **Appendix O** summarises the extent and findings of the consultation program. This in turn, has informed the Social Impact Assessment (**Appendix P**). Ongoing consultation will occur through the implementation of the Community Engagement Plan, post land use approval.

Conclusion

Consistent

Sense of community, place and identity

- Manage urban and rural growth and development to create, maintain and enhance a sense of community, place and local identity throughout the region.

Aquis Resort Response

The proposal will be a distinctive feature in the Cairns landscape and will create its own identity and place. The open space provision of the development includes golf and sporting facilities. Generous internal open space, including the lagoon, will be provided for guests of the resort and hotels.

Conclusion

Consistent

Arts and cultural development

- Support cultural development and the arts through the planning and provision of cultural infrastructure and spaces.

Aquis Resort Response	
<p>The facilities within the project will play an important role in providing places for a variety of community events, functions and meetings for a range of different local, national and international groups. It is anticipated that there will ample opportunity within the public realm places of the on-site hotels and facilities to showcase local arts and culture, including both indigenous and non-indigenous history of the area. These uses will foster opportunities for creative art, recreation and leisure industries in the broader community, which will stimulate wealth and additional job creation for the region. It is submitted that the scale and regional significance of the infrastructure and facilities proposed and their contribution to the broader community, are consistent with the overall scale of the proposed development.</p>	
Conclusion	Consistent

Cultural heritage

- Identify, protect and manage the region's unique cultural heritage, including historic places and landscapes of significance to the community.

Aquis Resort Response	
<p>Indigenous Cultural Heritage (ICH) and Non-indigenous Cultural Heritage (NICH) studies have been prepared.</p> <p>The ICH Study (refer to Section 21.1) recommends a number of actions with respect to preserving indigenous cultural heritage. The Cultural Heritage Management Plan – to be prepared in consultation with the local Aboriginal group – will provide more detailed survey and recommendations for the recognition of cultural heritage within the development.</p> <p>The NICH Study (refer to Section 21.2) identified 10 non-Indigenous cultural heritage sites. The sites identified in the project area include the cane barracks, old stables, old shed, bridge, flood gates, exotic planting, main house and exotic plantings. With the exception of the potential Chinese and European hut site, all of the identified NICH sites will be impacted on as a result of the development.</p> <p>The assessment found that with the exception of the Cane Barracks the other sites were assessed as not meeting the threshold for local or state significance. The study recommends that archival recording should be conducted to ensure that the local significance of the Cane Barracks is preserved.</p>	
Conclusion	Consistent

Strengthening Indigenous communities

- Regional planning processes recognise and facilitate the need to increase Indigenous economic and housing opportunities.
- Indigenous local government areas meet best practice land use planning and local administration frameworks, which provide equitable access to infrastructure and services for all community members.
- Regional planning processes recognise and facilitate implementation of Indigenous Land Use Agreements.

Aquis Resort Response	
<p>The recommendations of the Social Impact Assessment and the Cultural Heritage Study together with consultation with state agencies and the local aboriginal group emphasises the need to incorporate Indigenous cultural awareness, training and business opportunities as an ongoing foundation of developing and implementing social mitigation strategies within and across the community. Aquis Resort provides many opportunities to explore and enhance Indigenous programs either directly within the development or as a consequential flow-on of economic and business growth across the region. A Cultural Heritage Management Plan including Indigenous Engagement Strategy is being prepared in conjunction with the Yirrganydji people.</p>	
Conclusion	Consistent

URBAN DEVELOPMENT

Compact urban form

- Urban development is consolidated and compact to facilitate land use and infrastructure efficiencies, conserve regional landscape and rural production land, and promote a range of other community benefits.

Aquis Resort Response	
<p>This policy is directed primarily at the containment of development within the urban footprint. The subject land is not in the urban footprint; and is in the Regional Landscape and Rural Production Area. The site selection (Section 2.3.2) identified that there are limited options to accommodate a development of this scale on the coastal plain.</p> <p>As discussed in the Strategic Direction - Urban consolidation and land use efficiency above, the project site sits within the broader urban footprint of the Cairns urban area, thereby reducing urban sprawl. It uses land efficiently, minimises transport demands, encourages cost effective infrastructure and services, supports employment self-containment and activity for the Northern Beaches District and is consistent with economic, social, environmental and cultures values of the area. In this way the project assists in achieving the aspirations of this policy.</p>	
Conclusion	Consistent

Regional activity centres

- Activity centres to support the preferred pattern of development and promote self-containment.
- To promote regional activity centre vitality and viability via a proactive plan-led approach to land use and infrastructure allocation.

Aquis Resort Response

The Regional Plan sets out a hierarchy of Regional Activity Centres as the principal place of business, employment, research, education and higher density living in Tropical North Queensland. The primary objective is to ensure that the land uses proposed do not constitute out-of-centre development, weakening the role of Regional Activity Centres at Smithfield and in the Cairns CBD. The consequential population growth associated with the project will generate the need for more mixed use based centre activities and encourage self-containment in the Northern Beaches as this area will be strengthened by a focus on business and employment. The tourism industry based in the CBD will benefit from the increased visitor nights and tourism based spending across a wide range of businesses.

Conclusion

Consistent

Urban structure and master planning

- The urban footprint contains an appropriate land use mix to create a stronger, more liveable and sustainable community.

Aquis Resort Response

The project's location provides significant positive benefits in terms of improved accessibility to services, cost efficiencies in the provision of infrastructure, opportunities for employment and activities within the urban fabric or footprint of Cairns.

Conclusion

Consistent

Housing choice and affordability

- A variety of housing options are provided to facilitate housing choice and affordability to meet diverse community needs.
- Sufficient land is made available to meet longer term regional housing needs for a minimum of 15 years.

Aquis Resort Response

The project is an integrated tourism development. There is no permanent housing proposed. The consequential population growth will generate demand for more housing and accommodation throughout the Cairns urban area and region. Local and regional planning needs to ensure a mix of housing types and choices remain available as the community grows. The SIA (refer to **Chapter 14 – Social Impacts**) identifies the need for ongoing strategic land use planning by CRC to address the supply and demand of housing in the region.

Conclusion

Does not apply

Sustainable buildings and tropical design

- Urban development recognises the unique tropical character of the region and is designed and constructed to facilitate a sustainable lifestyle.

Aquis Resort Response	
<p>The built form for Aquis Resort will meet the architectural vision established for the project: The Aquis Resort design team, through the EIS process, has gained a thorough understanding of the environmental context of the resort and, when developing the built form, will take its inspiration from the natural elements of the area. The development will respond sympathetically to the many layers of natural forces affecting the site:</p> <ul style="list-style-type: none"> Consideration will be given to the orientation and shape of the buildings to maximise solar benefits. Landscape forms will be empathetically modelled to facilitate the flow of water through the flood plain. The buildings will be carefully positioned and shaped to allow natural ventilation through the site. The buildings will be positioned and oriented to capture the most valuable views of the reef and rainforest. <p>The Aquis Resort design team will integrate these environmental forces into a three dimensional model, which will sculpt the buildings from nature and embody the concept of 'tropical urbanism'. The design will take its cues from its context, and the architectural form will resonate with its surroundings and reinforce the identity of rainforest and reef. The infinite variety of forms, colours and materials found in nature will inform the design of the development at every level.</p>	
Conclusion	Consistent

Rural residential development

- Manage rural residential development to prevent fragmentation and alienation of agricultural land and loss or degradation of areas of high ecological significance and ensure efficient use of land and cost-effective delivery of services and infrastructure.

Aquis Resort Response	
N/A	
Conclusion	Does not apply

Mitigation of hazards

- Development minimises the potential adverse impacts of natural, industrial and climate change induced hazards and increases the resilience of people, environments, locations and economic sectors leading to a safer community and better quality of life.

Aquis Resort Response	
<p>The site is exposed to a number of natural hazards, the most important of which are tsunami, elevated water levels and high winds associated with tropical cyclones, and Barron River flooding. Of some but lesser risk are coastal erosion and river migration.</p> <p>As the preliminary design work undertaken to inform this EIS has shown, the site is large enough and the project sufficiently well-resourced to enable these constraints to be overcome. Specifically, the design has given attention to :</p> <ul style="list-style-type: none"> • design water levels for a suite of AEPs ('normal' to 'rare') • a decision on the response to 'rare' events (i.e. shelter in place rather than evacuate) • selection of associated design floor levels • provision of infrastructure and systems to cope with the selected response (or perhaps a combination of the two) • contribution to the development of external infrastructure • the development of an Integrated Emergency Management Plan to cover all eventualities. <p>The EIS demonstrates that these hazards will be managed appropriately at the design, construction and operation phases. (Refer to Section 12.6.1.)</p>	
Conclusion	Consistent

ECONOMIC DEVELOPMENT

Economic growth and diversification

- A diversified regional economy characterised by industries and economic activity centres, which build on existing regional and subregional competitive advantages and specialisations.
- The region's economic base diversifies, based on industries and activities, which complement the significant environmental values of the region.
- Economic development minimises the region's contribution to the causes of climate change and ensures industries are resilient to its impacts.
- An adequate supply of suitable and appropriately located commercial and industrial land is available to support the diverse range of businesses and industry sectors needed for regional economic development and developing liveable and sustainable communities and activity centres.

Aquis Resort Response	
<p>The Regional Plan encourages opportunities for diverse and innovative economic growth, with a range of employment in locations convenient to residential areas. The site consists of a number of large rural holdings, some of which are currently being used for sugar cane farming. The Regional Plan encourages economic diversification, with less reliance on tourism and to a lesser extent agricultural pursuits. Though the development is proposed in response to an international tourism market demand, the proposal will provide a wider range of employment and economic opportunities for the community.</p>	
Conclusion	Economic Growth – Consistent

Industry and business development

- Promote and expand business activity, increase business competitiveness and encourage regional exports and import replacement.

Aquis Resort Response	
The development proposed is to fill a gap in the international tourism market in Cairns for an accessible, man-made facility that is an attraction in itself, providing a base for international and domestic tourists to see the natural attractions of the area. It is considered that the proposed development is entirely consistent with the objectives of the Regional Plan for industry and business development.	
Conclusion	Consistent

Innovation and technology

- Foster innovation and develop technological capabilities in the region to enhance existing and emerging industries.

Aquis Resort Response	
The project will provide world class facilities for the hosting of conferences and delegations. In addition, its proximity and linkages to James Cook University will ensure the proposal fully supports existing and emerging industries in compliance with the Regional Plan.	
Conclusion	Consistent

Primary industries

- Maintain a profitable and sustainable agricultural sector in rural areas and fishing industry adjacent to coastal areas, producing and marketing a diverse range of products for domestic and export markets.

Aquis Resort Response	
<p>The development will result in the loss of over 300 ha of mapped SCL (the loss of productive cane land is only 62% of this). This farmed area represents 1.3% of 2012 total area harvested for Mulgrave Mill and 0.53% of the total area harvested by Mitr Phol's Mulgrave and South Johnstone Mills. Given the recent closure of the Babinda Mill and the reassignment of some of this land to the Mulgrave Mill, coupled by the potential ability of South Johnstone to draw cane from expanded production on the Atherton Tableland, the impact on the viability of the Mulgrave Mill is likely to be marginal.</p> <p>The main impacts of the loss of this cane land are expected to be on the cost of running transport infrastructure, as the cost of operating the line to Edmonton north relies on being spread across a 90,000 tonne production. In this context the percentage lost is 14% and this would reduce transport efficiency in terms of contributions to the maintenance of the line.</p> <p>Fisheries productivity is expected to benefit as a result of the protection of essentially all of the existing natural vegetation (53 ha), restoration of a further 56 ha of ecological plantings, reinforcement of internal riparian corridors, removal of waterway barriers, weed management, and reduction of export of sediments and nutrients. These initiatives will enhance fisheries values of the adjacent FHAs and contribute to greater biodiversity.</p>	
Conclusion	Consistent: Potential growth of primary industry sector to service project and population growth and enhancement of fisheries values
	Inconsistent - Loss of cropping land

Tourist development

- FNQ's international reputation as a world-class destination for nature-based and sustainable tourism is maintained and enhanced.

Aquis Resort Response	
The project proposes to specifically service an international and domestic tourist market for this type of experience together with conferences, arts and culture.	
Conclusion	Consistent

INFRASTRUCTURE

Infrastructure, planning and coordination

- Infrastructure is proactively planned, coordinated and provided to support desired regional growth in an efficient and effective manner, minimising the region's contribution to the causes of climate change and to build resilience to the impacts of climate change and oil vulnerability.

Aquis Resort Response	
<p>The site, located within the Cairns urban area, promotes urban consolidation and the provision of services and infrastructure within the existing urban framework. The development, with infrastructure augmentation and upgrades, can be serviced and will meet its obligations for network upgrades. Alternative solutions to the provision of water (potable and non-potable options), the re-use of waste water from local sources, a waste minimisation strategy and significant upgrades to the power and telecommunications networks in the area mean that Yorkeys Knob residents and the Northern Beaches will be better served in the short to medium term than current infrastructure planning provided. (Refer to Sections 25.1.3, 25.2.3 and 25.3.3.)</p> <p>In relation to infrastructure upgrades, the proponent proposes that it enter into an Infrastructure Agreement with CRC and the Department of Transport and Main Roads to contribute its proportionate share of the cost of the upgrades to the transport, water and waste water networks, and cost sharing arrangements for shared trunk infrastructure.</p>	
Conclusion	Consistent

Infrastructure funding

- Facilitate efficient funding of infrastructure to new and existing urban areas.

Aquis Resort Response	
<p>The proponent proposes that it enter into an Infrastructure Agreement with CRC and the Department of Transport and Main Roads on the basis that:</p> <ul style="list-style-type: none"> • the development is considered as separate to and independent of the Council Trunk Infrastructure Contribution Policy • the cost of dedicated trunk infrastructure to connect the development to the transport, water and waste water networks, where it has capacity is met by the proponent • the proponent will contribute its proportionate share of the cost of the upgrades to the transport, water and waste water networks • cost sharing arrangements would be identified for shared trunk infrastructure. 	
Conclusion	Consistent

Energy

- Sustainable energy generation, transmission and distribution capacity is provided and maintained; using viable alternative energy sources where practicable, to service existing and future settlement patterns and meet the needs of a growing population and industry.

Aquis Resort Response	
<p>The provision of power and telecommunications to the development site will require augmentation as the demands of the development cannot currently be met by service providers. (Refer to Section 25.3.2.) The Aquis Resort development will generate the need to implement the planned upgrade of McGregor Road electrical switchyard and associated electrical reticulation augmentation. (Refer to Section 25.3.3.)</p> <p>The proponent is committed to adopting sustainable development practices, including green building design, water harvesting and re-use (treating waste water and rainwater), energy efficiency and waste minimisation, re-use and recycling across the development site during the construction and operational phases of the development. These will be adopted as part of the ongoing environmental management plan (construction and operation).</p>	
Conclusion	Consistent

Waste

- Manage solid waste in the region to minimise adverse impacts on the environment and the community and promote sustainable waste management practices.

Aquis Resort Response	
<p>A detailed Waste Management Study was prepared for the EIS (Appendix T). The findings of the study assess likely waste generation for the construction and operational phases of the project. The Aquis Resort Waste Management Strategy details how the waste management hierarchy (refer to Section 18.3.1) will be applied to various waste streams. The proponent will continue to work with CRC to identify opportunities to support the objectives of increased waste recovery/recycling and minimising waste disposal to landfill.</p>	
Conclusion	Consistent

Information communication technology

- Provide affordable access to reliable and robust high speed telecommunication throughout the FNQ region to ensure access to markets, information and services.

Aquis Resort Response	
<p>The telecommunication to the Yorkeys Knob area is currently adequate but has several limitations in both bandwidth and coverage. The NBN rollout has this area earmarked for commencement sometime in the next three years. The major communication infrastructure would need to be upgraded back to the Freshwater exchange, providing a significant improvement to wideband and mobile service coverage. The development would require the establishment of a new exchange and broadband hub as well as new mobile towers for construction and final development coverage. Building coverage would need to be implemented as part of the building design. (Refer Section 25.3.3.)</p> <p>The advancement of major communications infrastructure projects to cater for the Aquis Resort development will provide a flow on benefit to the Yorkeys Knob residents with the provision of service they would otherwise have not had available for several years. These infrastructure projects will also provide support to other major developments in the Northern Beaches and Smithfield areas, particularly JCU Campus and Smithfield Shopping Centre.</p>	
Conclusion	Consistent

WATER MANAGEMENT

Protection of waterways, wetlands and water quality

- Protect and improve the physical condition, ecological health, environmental values and water quality of surface water and groundwater systems, including waterways, wetlands, estuaries and waters of the Great Barrier Reef lagoon.

Aquis Resort Response	
<p>With the exception of minor clearing for infrastructure corridors and the removal of the disused aquaculture ponds safety and environmental reasons, very little natural vegetation is to be cleared. Inclusion of this land in an area to be protected by town planning approvals will remove current threatening processes and lack of protection. An additional 56 ha of native vegetation will be planted and this will provide habitat for listed plants and animals as well as reinforcing ecological connectivity through the site, to the benefit of upstream areas (e.g. Cattana Wetlands) and downstream areas (e.g. the two FHAs and the state and Commonwealth marine parks). Removal of existing waterway barriers (tide gates and undersized culverts) will enhance aquatic and terrestrial connectivity as well as improve tidal flushing and thereby enhance water quality in Half Moon and Yorkeys Creek.</p> <p>The adoption of WSUD principles and the re-use of over 1400 ML/a of treated effluent from the Marlin Coast WWTP means that, compared with current farming activity, there will be a net reduction of pollutants exported to the GBR, even allowing for the sewage production of the development. This reduction is estimated to involve a total of over 133 t/a and can be expected to have a beneficial effect on the water quality of the GBR lagoon. Proposed rehabilitation of the Half Moon Creek and Yorkeys Creek corridors within the site will improve water quality in that system.</p> <p>(Refer to Section 11.3.)</p>	
Conclusion	Consistent

Total water cycle management

- Water is acknowledged as a valuable and finite regional resource that needs to be managed on a total water cycle basis, balancing the uses of water and its role in the environment.

Aquis Resort Response	
<p>The EIS recommends the development of an Integrated Water Management Strategy aimed at the coordinated and strategic planning process for the holistic management of water, wastewater and stormwater systems. (Refer to Section 11.2.) Two major elements of this already incorporated into planning are the use of WSUD principles and the use of treated effluent as a potable water substitute. Treated effluent purchased from the Marlin Coast WWTP is to be used to substitute a large percentage of the otherwise potable water demand (as well as reducing the export of pollutants to the GBR lagoon). Rainwater harvesting will be investigated along with a suite of conservation measures outlined in the Sustainability Strategy. (Refer to Section 23.3.)</p>	
Conclusion	Consistent

Water planning

- Water in the region is sustainably managed to provide for the allocation and use of water for the physical, economic and social well-being of the people of Far North Queensland and for the environment.
- Security of supply is increased and overall system costs minimised by planning and coordinating regional water supplies.

Aquis Resort Response	
<p>The Far North Queensland Regional Water Supply Strategy (FNQRWSS) outlines options for managing the region's water supply requirements for the next 50 years. The strategy seeks to achieve optimal environmental, social and economic outcomes and to advance solutions for the region's future urban, rural and industrial water needs.</p> <p>The current raw water supply is at capacity and CRC will need to bring on line additional raw water sources to meet the future growth needs of Cairns including the demand generated by Aquis Resort. These potential sources have been identified by CRC as the Mulgrave River Aquifers and the Barron River at Lake Placid. (Refer to Section 25.1.1.)</p> <p>The proposed development will result in:</p> <ul style="list-style-type: none"> • infrastructure that has not been included current planning and that would be wholly attributable to the proposed development, and • future infrastructure that is currently planned that would need to be brought forward in time to accommodate the proposed development. <p>The proponent proposes that it enter into an Infrastructure Agreement with CRC to facilitate the necessary water supply for the development.</p>	
Conclusion	Consistent

Water demand management

- Incorporate demand management in planning and building standards to manage consumer behaviour and demand for water.

Aquis Resort Response	
<p>Water demand has been mitigated by adopting water wise initiatives through the use of flow control devices as fittings in laundries, kitchens and bathrooms, the implementation of operational procedures to reduce water use during construction and operations, and the utilisation of non-potable water sources for non-contact purposes including irrigation and toilet flushing. Examples of non-potable sources proposed include:</p> <ul style="list-style-type: none"> • effluent re-use water (recycled water) • rainwater harvesting from rooftops • stormwater runoff harvesting (car parks and public spaces). <p>Section 25.1.2 describes the water demands and demand mitigation management regime proposed for Aquis. The proposed regime results in a 50% reduction in potable water demands for the development.</p>	
Conclusion	Consistent

Water supply

- Assured supplies of water are provided to meet the needs of growth and development in the region.

Aquis Resort Response	
<p>The current raw water supply is at capacity and CRC will need to bring on line additional raw water sources to meet the future growth needs of Cairns including the demand generated by Aquis Resort. These potential sources have been identified by CRC as the Mulgrave River Aquifers and the Barron River at Lake Placid. Options are discussed in Section 25.1.</p> <p>Given the shortfall in capacity of the CRC water supply system to supply the construction and operation phase demands of Aquis Resort, the following options are available:</p> <ul style="list-style-type: none"> increase supply by upgrading the regional system (this is a decision for Council to make), reduce the demand on CRC water by utilising suitable water from other sources, and/or reduce consumption by various conservation measures (i.e. design-related). <p>Options for the provision of water supply are discussed in Section 25.2.2. Both potable and non-potable sources are investigated. Both potable and non-potable sources are investigated. Treated effluent will be suitable for all non-potable uses and is the primary non-potable source. Harvested stormwater provides opportunity to supplement the re-use water supply</p>	
Conclusion	Consistent

Rural water

- Ensure rural water needs are met in an efficient and sustainable way.

Aquis Resort Response	
Not applicable	
Conclusion	Does not apply

TRANSPORT

Integrated transport and land use planning

- Achieve an efficient, integrated transport system that meets community needs, supports a more compact pattern of urban development, promotes the self-containment of travel in subregions within FNQ and maintains efficient transport connections within the region and with other regions.

Aquis Resort Response	
<p>The trip demands generated by the development will be significant in the context of the Cairns transport network. Trip demands include the following trip categories: resident guests checking in and out, guests leaving and returning on day trips, day visitors from other guest houses and Cairns locals, staff arriving and leaving for work, 'back-of-house' deliveries. The implementation of a dedicated High Occupancy Vehicle (HOV) fleet for the transfer of guests will result in a significant reduction in the pressure on the public transport service. The development will provide direct linkages and ease of interchange for passengers between existing and future public passenger transport, including other transport modes. (Refer to Section 24.1.3.)</p> <p>On-site facilities will be provided for safe and efficient bus and high occupancy vehicle parking and transfer of passengers. External to the site the proponent will seek to complement existing transit and bus stop facilities by contributions to upgrades in consultation with DTMR and CRC.</p>	
Conclusion	Consistent

Transport networks

- Highly connected transport networks provide strong links between activity centres and surrounding areas, to enable good accessibility, route and mode choice.

Aquis Resort Response	
<p>The development will create a broad spectrum of traffic demands and associated modal needs during construction and operation phases of the project. Infrastructure requirements are detailed in Sections 24.1.2, 24.2.2, 24.3.2, 24.4.2, 24.5.2 and 24.6.2.</p> <p>Yorkeys Knob Road and Dunne Road will be the primary elements of the local road network that will service the development. Yorkeys Knob Road will provide connectivity for motor vehicles and bicycles to the State Controlled Network at the Captain Cook Highway and Dunne Road will connect to the planned Northern Beaches Interconnector Road for local trips to and from the Northern Beaches network. The Cairns Western Arterial Road will provide connectivity from southern and western catchments of Cairns to the Captain Cook Highway. (Refer to Section 24.1.3.)</p> <p>The internal design of the development will accommodate a circulation network for cars, buses, coaches, limousines, high occupancy vehicles (HOV), taxis. Upgrades to local and state transport networks will include the provision of bus stops and associated facilities in consultation with relevant state agencies.</p> <p>Active transport (cycling and walking) connections are planned which provide strong pedestrian and cycling linkage between Aquis Resort and Yorkeys knob and to a lesser extent to the Northern Beaches and the remainder of the Cairns Urban Area. A suitable off road shared facility is proposed to be constructed to provide safe and functional movements of bicycles and pedestrians between Yorkeys Knob and the development with the upgrades of Yorkeys Knob and Dunne Road including the provision of a high standard on/off cyclist and pedestrian lane/facilities.</p>	
Conclusion	Consistent

Transport infrastructure

- Affordable and efficient air, sea, rail and road transport infrastructure supports a vibrant economy and meets community and tourist needs.

Aquis Resort Response	
See 8.1 above.	
Conclusion	Consistent

5.2.3 Cairns Plan

This section provides a summary of the proposed development's performance against the relevant provisions of the current CRC CairnsPlan 2009.

Cross references are made to the respective sections as appropriate. This assessment should be read in conjunction with these sections.

VISION

Balancing the demands of its growing population and the desire to maintain quality of life

Aquis Resort Response	
<p>The Aquis Resort will be of a scale far in excess of any tourist development in Queensland. The positive impacts on the local and State economy will be significant and will result in an increased demand for housing and essential infrastructure. Increased employment during each of the planning, construction and operational phases is described in Section 13.2.</p> <p>An individual's or families' quality of life is reflected in their employment, housing and the lifestyle they lead. The capacity of the development sector to respond to the market demand will be a key driver of the relative impact of Aquis Resort on residential sale and rental prices. This in turn has flow-on financial impacts on residents as land values, housing prices and rentals respond to the supply and demand pressures. A number of mitigation strategies are proposed Chapter 6 of the EIS which will be implemented to ensure that the relevant organisations across the Cairns region continue to respond to the ongoing needs of the population, especially in the area of human services and needs.</p>	
Conclusion	Consistent

Maintaining unique natural and cultural environments

Aquis Resort Response	
<p>The unique natural and cultural environments endemic to Cairns are part of the attraction which the proposed development seeks to promote with international tourists. The success of the resort depends on these tourists being able to enjoy the values associated with the regions' quality of life and tourist appeal. Notwithstanding its large scale and built form, the development retains all elements of its natural setting and actively enhances this. Accordingly, Aquis Resort does not challenge these environments, but seeks to enhance and promote them.</p>	
Conclusion	Consistent

The economy is vibrant, robust and diverse, firmly based on the principles of ecologically sustainable development

Aquis Resort Response	
<p>Aquis Resort represents a massive capital investment in Cairns and the Regional economy. The development of an international standard Integrated resort opens the regional economy to the burgeoning Chinese Middle class travel market. Regional entry into the Integrated resort market provides the opportunity to provide 'new product' to a 'new market'. The construction and operation of an Integrated resort on the scale proposed with provide opportunities for the provision of goods and services from existing local and regional suppliers and well as providing for growth in the regional economy for new suppliers and providers of services. The demand for skills and labour during construction and when operating will provide significant employment and population growth with consequential opportunities for the housing and development industry and the construction industry and their various supply chains.</p> <p>Although Aquis Resort represents a substantial increase in the supply of tourism accommodation it also provides the opportunity for increased demand for existing tourism products including rainforest and reef visitation. Consequential population group will stimulate demand across all sectors of the economy.</p> <p>The substantial increase in visitation numbers to Cairns and the region can lead to the flattening of the peaks and troughs of the existing market leading to more resilience and stability for existing operators.</p> <p>The capital investment as well as the 'import' of tourism expenditure from a new market will contribute to a more dynamic and robust regional economy and opportunities for diversified goods and services to an expanded visitor and resident population.</p> <p>Overall, the Aquis Resort proposal meets expectations pertaining to the natural environment including the minimisation of risk to natural hazards. It meets expectations in its relationship to Cairns Airport and other essential infrastructure. Its economic contribution exceeds all proposed expectations for the Cairns region.</p>	
Conclusion	Consistent

Having the highest standards of excellence applied in the management of the City

Aquis Resort Response	
<p>The guiding principle for the project is to establish a world class tourism development in Cairns which attracts international tourist to North Queensland. The project will allow North Queensland to benefit from the increasing trend of outbound tourism from Asia, particularly China.</p> <p>Aquis Resort envisages:</p> <ul style="list-style-type: none"> • A master planned fully integrated resort and tourist facility which will set the benchmark for tourism development in North Queensland; • Resort style amenity and quality of place that ensures that Aquis Resort is the international tourist destination of choice; • A diverse range of accommodation types that is suited to the local or the international tourist; • Ancillary facilities such as world class aquarium, waterpark, championship golf course and stadium which will encourage locals and tourist alike to utilise the exceptional facilities; • Leading performance in ecological and built form sustainability; • Connection with natural values through the revegetated zones and buffers along existing watercourses; and • Best practice design in water quality and flood mitigation treatments. 	
Conclusion	Consistent

DESIRED ENVIRONMENTAL OUTCOMES

DEO: ECOLOGICAL PROCESSES AND NATURAL SYSTEMS

Ecological Processes and Biodiversity: The biodiversity and nature conservation values of the marine, terrestrial and freshwater ecosystems within the City are conserved and enhanced.

Aquis Resort Response	
<p>The Concept Master Plan includes provision for protecting almost all natural vegetation on the site (with the exception of some small infrastructure crossings) but more importantly, the inclusion of 56 ha of new habitat and reinforcement of aquatic and terrestrial connectivity will complement the 53 ha of natural vegetation to remain and thereby reinforce important riparian corridors that ultimately connect the site with the WTWHA (i.e. via Richters Creek and Half Moon Creek). Improved connectivity between the Coral Sea and the Cattana Wetlands will be enhanced due to improvement in the quality and robustness of the Half Moon Creek and Yorkeys Creek corridors. (Refer to Section 7.2.2.)</p> <p>The adoption of WSUD principles and re-use of treated effluent will reduce net export of pollutants to the GBR lagoon when compared with the existing land use.</p>	
Conclusion	Consistent

Catchments and Waterways: Water quality, in-stream and riparian values and nature based recreation values of natural and modified waterways and wetlands and their catchments within the City are conserved and enhanced.

Aquis Resort Response	
<p>The site's role in the preservation and enhancement of the City's catchments and waterways is a conservation value particularly relevant in the context of impacts on the Great Barrier Reef Marine Park, coastal processes, and water quality. The environmental assessment in the EIS addresses the impact of the proposal on water quality, and waterway values including water quality treatments and stormwater mitigation. The assessment finds that the waterways' values are conserved and enhanced.</p> <p>Improved connectivity between the Coral Sea and the Cattana Wetlands will be enhanced due to improvement in the quality and robustness of the Half Moon Creek and Yorkeys Creek corridors by restoration works on these areas where they pass through the site. Existing waterway barriers (tide gates and undersized culverts) will be removed, thereby enhancing waterway values. (Refer to Section 7.2.2.)</p>	
Conclusion	Consistent

The Tropical Coastline: The values of all the coastal systems of the City for coastal stability, ecological processes and nature based recreation are conserved and enhanced.

Aquis Resort Response	
<p>The tropical coastline is an important asset. Whilst the subject site is not located directly adjacent to the coast (i.e. the site is set behind the frontal dune); the influence of storm tide associated with cyclones and extreme weather events significantly impacts the site. Habitable floors in the permanent structures associated with the development will be set above the PMF flood and storm tide level and will be designed to allow for wave overtopping and greater freeboard provided. The development will also be designed to avoid significant changes in creek dynamics particularly at the creek entrance and adjacent shoreline. The coastal investigations in this EIS address the impact of the development on coastal processes and climate change and sea level rise impacts. The assessment finds the development can satisfactorily proceed whilst maintaining all values associated with the coast. (Refer to Section 8.2.2 and Section 8.3.2.)</p> <p>The development does not seek to access public land on the foreshore (other than for minor lake water exchange infrastructure at the mouth of Richters Creek) and all remaining coastal and riparian vegetation will remain.</p>	
Conclusion	Consistent

The Scenic Landscape: The scenic landscape of the City is valued and enjoyed by residents and visitors, and the essential elements of this landscape, the forested hills and foothills, beaches and headlands, streams and rivers, wetlands, open spaces and rural land are conserved and enhanced.

Aquis Resort Response	
<p>The site's role in the preservation of the scenic landscape of significant relevance to the development proposal. The FNQ Regional Plan as well as the CairnsPlan 2009 places significant weight on the protection of the scenic amenity of the City including the foothills as a backdrop to coastal areas. The scenic amenity assessment in this EIS addresses the impact of the development proposal on the scenic values of the Barron River delta as well as the City's foothills and forested areas. The assessment finds that whilst the proposal is a significant development in the context of the scenic landscape of both the region and the immediate locality, the overriding features of the Barron River delta as a regional landscape are not diminished by the development proposal.</p> <p>There will be an unavoidable change in the local landscape character as the cane land is converted to a more urban form. However, the bushland setting will remain (and be enhanced by 57 ha of new plantings) and the forested creek corridors will be reinforced.</p>	
Conclusion	Consistent – regional landscape not diminished
	Inconsistent – Change in rural use to urban use

DEO: ECONOMIC DEVELOPMENT

Primary Production: Primary industries, particularly sugar cane production, continue to contribute to the economy of the City and to employment within the City.

The effects of urban development on the resource of good quality agricultural land and on the operation of primary industries are minimised.

The preferred pattern of development shown on the Structure Plan Map 4 limits the encroachment of urban development on to good quality agricultural land.

Aquis Resort Response	
<p>The subject site's role and the impacts on primary production, specifically sugar cane production, are of relevance to the development proposal due to cane land being removed. The subject site includes 180ha of sugar cane farm on the 340 ha. The economic assessment in this EIS addresses the impact of the development on the loss of agricultural land and the impacts to the City's economy as a result. The equivalent loss of sugar cane is estimated to be \$0.76 million per annum of sugar cane production. Whilst a loss of approximately \$1 million per annum of sugar cane expenditure has some impact on the City's economy, the overall contribution and estimated direct expenditure of \$1.98 billion generated by the proposed development is considered to significantly outweigh the value of sugar cane production foregone. The assessment of Strategic Cropping land shows only 62% of mapped SCL has been farmed. The loss of SCL is also outweighed by the benefit to the State by Aquis Resort proceeding.</p>	
Conclusion	Inconsistent:

Economic Activity and Employment Centres: Business, retail and industrial activities are located in a hierarchy of centres and in designated areas throughout Cairns to encourage continued investment and an increase in the diversity and number of employment opportunities. Sub-regional, District and Local Centres are developed that contribute to a sense of community life and belonging for the people they serve.

The Sub-Regional and District centres and the major industrial and employment areas identified on the Structure Plan Map 4, are established and consolidated.

Aquis Resort Response	
<p>The FNQ Regional Plan sets out a hierarchy of Regional Activity Centres as the principal place of business, employment, research, education and higher density living in Cairns. The primary objective is to ensure that the land uses proposed do not constitute out-of-centre development, weakening the role of Regional Activity Centres at Smithfield and in the Cairns CBD. Aquis Resort is not located in a nominated Activity Centre. However, it will strengthen these activities through the provision of direct and indirect employment opportunities both during the construction and operational phases - at a level never seen before in Queensland (refer to Section 13.2).</p> <p>The consequential population growth associated with the project will generate the need for more mixed use based activities and encourage self-containment in the Northern Beaches as this area will be strengthened by a focus on business and employment. The tourism industry based in the CBD will benefit from the increased visitor nights and tourism based spending across a wide range of businesses.</p>	
Conclusion	Consistent - economic growth

Tourism Industry

The tourism industry continues to play a major role in the economic growth of the City and the Region. The sustainable use of the resources of the natural environment contributes to the strength of the industry. Development of major tourist accommodation is concentrated in the areas identified on Map 2. The major tourist attractions depicted on Map 2 are maintained and consolidated. The potential conflicts between tourist accommodation, attractions and facilities and local communities are minimised.

Aquis Resort Response

Aquis Resort represents a unique and significant opportunity to underpin visitation growth from key international markets, most notably China, and assist in capitalising on the opportunity from a growing Asian middle class with significant wealth and purchasing power. It is being developed as an integrate resort on a scale not previously seen in Australia and will create a significant amount of additional capacity to the TNQ tourism industry. In particular, Aquis Resort is estimated to:

- increase international visitation to TNQ by 900 000 visitors per annum, or about 142% relative to 2012 visitation levels
- create additional bed capacity of 30% relative to bed capacity in March 2013.

Analysis of the historical performance of the TNQ tourism industry and broader drivers of change demonstrates that Aquis Resort has the potential to underpin growth in the TNQ tourism industry and broader economy, through:

- increased visitor arrivals to TNQ, and potentially other areas in Queensland and Australia
- increased visitor expenditure (i.e. tourism exports) in TNQ, Queensland, and Australia
- flow-on impacts to supporting industries and the economy more broadly.

The proposed development is located in the Barron River delta at Yorkeys Knob, outside the nominated tourist areas in Cairns LGA. The intent of the Barron-Smithfield District as identified in the CairnsPlan is to promote continued urban development with residential and tourist accommodation located at Yorkeys Knob in proximity to the water front. The proposed development sits within the urban settlement pattern identified in the CairnsPlan and the FNQ Regional Plan and is centrally located to local tourist attractions, higher order shopping facilities, the Cairns International Airport and essential infrastructure.

Conclusion

Consistent: promotes tourism in Cairns region

Preservation of Resources:

Natural resources, such as extractive resources, good quality agricultural land, water and forestry resources within the City, are protected from encroachment by, and the adverse effects of, urban development and are utilised in a sustainable manner.

The extractive resource sites identified on Map 3 remain available for the extraction of materials. The extractive industry haul routes identified on Map 3 are, to the extent possible taking account of the established pattern of land use, protected from incompatible development.

The preferred pattern of development shown on the Structure Plan, Map 4 limits the encroachment of urban development into areas containing natural resources.

Aquis Resort Response

The subject site's role and the impacts on agricultural land have been discussed in the EIS and in particular in **Section 5.1**. The overall benefits of the proposed development to the local economy and the region when compared to the loss of sugar cane production land are significant. Other impacts on natural resources such as extractive industries and water and forestry industries have no relevance.

Conclusion

Inconsistent: loss of primary production land

Pattern of Urban Development:

The pattern of urban development recognises the importance of the natural environment, natural resources and quality of life to the viability of Cairns and the wellbeing of its residents.

The pattern of urban development provides opportunities for growth and consolidation within the framework established by the Regional Plan and achieves the efficient use of existing and planned infrastructure.

The preferred pattern of development shown on the Structure Plan, Map 4 is achieved.

Aquis Resort Response	
Whilst not shown as an area for urban purposes or within the 'urban footprint' of the FNQRP, this site is appropriate to accommodate the scale of development proposed, acknowledging the limited options available to development in this region. (Refer to comments in the FNQRP section above.)	
Conclusion	Consistent: location within the broader Cairns urban area
	Inconsistent: outside the nominated urban footprint

Physical Infrastructure: The pattern of urban development facilitates the efficient use of existing and committed infrastructure.

Physical infrastructure is provided in an efficient and equitable manner and to a level necessary to achieve contemporary environmental standards.

Aquis Resort Response	
The site, located within the Cairns urban area, promotes urban consolidation and the provision of services and infrastructure within the existing urban framework. The development, with infrastructure augmentation and upgrades, can be serviced and will meet its consequences of network upgrades. Alternative solutions to the provision of water (potable and non-potable options), the re-use of waste water from local sources, a waste minimisation strategy and significant upgrades to the power and telecommunications networks in the area mean that Yorkeys Knob residents and the Northern Beaches will be better served in the short to medium term than current infrastructure planning provided. (Refer to Sections 24.1.3, 24.5.3, 24.6.3, 25.1.3, 25.2.3 and 25.3.3.)	
In relation to costs of infrastructure upgrades, the proponent proposes that it enter into an Infrastructure Agreement with CRC and the Department of Transport and Main Roads on the basis that:	
<ul style="list-style-type: none"> • the development is considered as separate to and independent of the Council Trunk Infrastructure Contribution Policy • the cost of dedicated trunk infrastructure to connect the development to the transport, water and waste water networks, where it has capacity is met by the proponent • the proponent will contribute its proportionate share of the cost of the upgrades to the transport, water and waste water networks • cost sharing arrangements would be identified for shared trunk infrastructure. 	
Conclusion	Consistent

Transportation: Air, sea and rail transport systems, public transport, road transport and facilities for cyclists and pedestrians are integrated with urban development to facilitate the safe, efficient and effective movement of people and goods locally, nationally and internationally.

The establishment and maintenance of the major transport infrastructure of the Cairns International Airport, Cairns Seaport, highways/ arterial roads and railways required to provide for this movement of people and goods, as identified on the Structure Plan, Map 4, is facilitated.

The implementation of the Long Term Public Transport Network, shown on Map 5, is facilitated.

Aquis Resort Response	
<p>Road Network: The traffic generated as a result of the development requires 'bring-forward' on planned works on the Captain Cook Highway and Cairns Western Arterial Road to the development site. These are accessed via Yorkeys Knob and Dunne Roads. (Refer to Section 24.1.3.)</p> <p>A strategic assessment of impacts on the Cairns Regional Road Network was undertaken using the current EMME2 Cairns Strategic Transit Model to establish the breadth of impacts that the development may create. To ensure ongoing functionality and safety a suite of upgrades is proposed as a result of the Aquis Resort development. The State and local road upgrades proposed are consistent with the road hierarchy adopted in the Cairns Transport Network Report (DTMR and CRC). Chapter 7 contains possible road network solutions.</p> <p>Airport: The Cairns Airport has sufficient latent capacity to cater for the 22% growth in flights created by Aquis Resort. Any peripheral infrastructure upgrades triggered by the increase in flights will be funded and constructed by Cairns Airport Limited in response to the demand. There are no mitigation measures proposed for airport infrastructure. (Refer to Section 24.4.3.)</p> <p>Seaport: The Aquis Resort development creates opportunity for Ports North to invest and increase containerised freight handling facilities at the Port of Cairns. This would be subject to a business case justifying the investment. Ports North have indicated they have ample handling space and storage to meet the demand. The increase in visitors into Cairns will trigger potentially significant demands on the Reef Fleet. Private enterprise would likely respond to the demand by bringing more boats into the fleet, and Ports North have indicated that there is planning in place for two additional marina piers to be installed as part of City Port. These would create space for several more reef fleet craft if the demand existed. (Refer to Section 24.3.3.)</p> <p>Pedestrian /cyclists: The project provides the opportunity to implement some components of the pedestrian and cycleway strategic planning for the Northern Beaches. The strong desire line between Yorkeys Knob and Aquis Resort will demand that a suitable off road shared facility be constructed to provide safe and functional movements of bicycles and pedestrians. Proposed upgrading of Yorkeys Knob Road and Dunne Road will include on-road bicycle lanes. Within the site the proponent will make provision for bicycle facilities that will make the active transport choices attractive. (Refer to Section 24.6.3.)</p>	
Conclusion	Consistent

DEO: CULTURAL, ECONOMIC, PHYSICAL AND SOCIAL WELL-BEING

Liveable, Sustainable, Tropical City: The combination of natural features, built environment, and development patterns result in a liveable, sustainable, and tropical city promoting a distinct Cairns style. The essential elements of outdoor living, access to natural areas, good air quality, efficient housing and tropical design are promoted to ensure the Cairns lifestyle is maintained and enhanced

Aquis Resort Response	
<p>The built form for Aquis Resort will meet the architectural vision established for the project:</p> <ul style="list-style-type: none"> • The site for the Aquis Resort has the unique distinction of being positioned between two World Heritage sites: the Great Barrier Reef and the Wet Tropics Rainforest • The Australian Aboriginal people and the Torres Straits Islanders have been living in harmony with nature for over 40 000 years and it is that desire to be in harmony with nature that will drive the design of Aquis Resort • The Aquis Resort design team, through the EIS process, has gained a thorough understanding of the environmental context of the resort and, when developing the built form, will take its inspiration from the natural elements of the area. The development will respond sympathetically to the many layers of natural forces affecting the site: <ul style="list-style-type: none"> - Consideration will be given to the orientation and shape of the buildings to maximise solar benefits. - Landscape forms will be empathetically modelled to facilitate the flow of water through the flood plain. - The buildings will be carefully positioned and shaped to allow natural ventilation through the site. - The buildings will be positioned and oriented to capture the most valuable views of the reef and rainforest. • The Aquis Resort design team will integrate these environmental forces into a three dimensional model, which will sculpt the buildings from nature and embody the concept of 'tropical urbanism'. <p>The form of the architecture must be distinctive and uniquely recognisable, with a strong identity that will attract visitors from around the world. The design will take its cues from its context, and the architectural form will resonate with its surroundings and reinforce the identity of rainforest and reef. The infinite variety of forms, colours and materials found in nature will inform the design of the development at every level. This will also allow a variety of experiences in the resort, creating points of difference between the various hotel products, which will encourage repeat visitors to the resort.</p> <p>Aquis Resort will maintain and enhance these values by its design, operations and positive environmental benefits and employment.</p>	
Conclusion	Consistent

Housing: The provision of a diverse choice of housing that is responsive to the climate, landscape and the changing demographic structure of the Cairns population while being affordable and efficient.

Aquis Resort Response	
<p>This has no relevance to the site, but it is expected additional housing will be provided throughout the region as a consequence of the site's development.</p>	
Conclusion	Does not apply

Cultural Heritage: Places of cultural heritage significance are conserved to retain their significance for the benefit of present and future generations.

Aquis Resort Response	
<p>The Indigenous Cultural Heritage Study (refer to Section 21.1) recommends a number of actions with respect to preserving Indigenous cultural heritage. These can be accommodated.</p> <p>In relation to non-Indigenous cultural heritage, the Non-Indigenous Cultural Heritage Study (refer to Section 21.2.1) identified 10 non-Indigenous cultural heritage sites. The sites identified in the project area include the cane barracks, old stables, old shed, bridge, flood gates, exotic planting, main house and exotic plantings. With the exception of the potential Chinese and European hut site, all of the identified NICH sites will be impacted on as a result of the development.</p> <p>The assessment found that with the exception of the Cane Barracks the other sites were assessed as not meeting the threshold for local or state significance. The study recommends that archival recording should be conducted to ensure that the local significance of the Cane Barracks is preserved.</p>	
Conclusion	Consistent

Sense of Community: Communities are created with a recognisable character and sense of place and which have a high level of amenity, safety, connectivity and integration between existing and new areas.

Aquis Resort Response	
<p>The development will be a destination in itself, hosting domestic and international events, conferences, shows and festivals. Combined with the significant outdoor facilities, tropical reef theme and extensive public realm areas, its sense of identity will be enhanced through its ability to integrate into the Cairns urban fabric on an environmental, social, cultural and economic level.</p>	
Conclusion	Consistent

Community and Social Facilities: Access to a range of community and social facilities for both established and new residential communities is facilitated, with community and social facilities being located so as to be convenient and highly accessible to the individuals, families and communities they serve.

Aquis Resort Response	
<p>Aquis Resort will include a range of community and social facilities on-site and will connect with the existing urban fabric of Cairns through its transport connections, employment and staff, promotion of the region as a major tourist destination and its economic benefits to the region.</p>	
Conclusion	Consistent

PLANNING FOR DISTRICTS: BARRON – SMITHFIELD

The Cairns LGA is divided into a number of Planning Districts. Each District establishes a framework for land use and development in that particular area. The description of the District details the preferred pattern of development and the constraints which may be applicable to that area.

The dominant features of the Barron-Smithfield District are the areas adjacent to the coastline and waterways; the floodplain of the Barron River delta, the cane fields, the urban areas of Machans Beach, Holloways Beach and Yorkeys Knob and the views across floodplain to the Barron Gorge and the forested hillslopes of the Kuranda Range. The District accommodates the major attractions of Skyrail and the Tjapukai Aboriginal Cultural Park.

The Aquis Resort proposes to override the CairnsPlan 2009 by changing the rural nature of the site from the existing cane farm to an urban development consisting of an integrated tourist resort and associated facilities. The site is well-located to connect with the Smithfield Activity Centre and will bolster self-containment of employment and housing in the Northern Beaches area resulting from an increased focus of activity to the area.

Significant gains in the connectivity of ecological systems will be achieved by the development as improved vegetation links between the coast and Cattana Wetlands are proposed. This includes rehabilitative plantings along waterways and creek lines and the removal of a number of waterway barriers within the site. Significant infrastructure (water, power, sewer, roads) upgrades will be constructed to address the increased demands on these systems. The consequential improvements for existing and future residents of the area will be evident once operational.

CAIRNSPLAN 2009 CODES

The Codes in CairnsPlan 2009 set out some of the requirements for development in the Cairns LGA. There are four sets of Codes:

- Planning Area
- Overlay
- Land Use
- General.

PLANNING AREA CODE – RURAL 1

Purpose

- Areas for use for primary production, particularly areas of Good Quality Agricultural Land, are conserved and are not unnecessarily fragmented
- The establishment of a wide range of agricultural and animal husbandry uses, together with other compatible primary production uses, is facilitated
- The establishment of farm forestry in suitable locations is facilitated
- The establishment of extractive industry operations is facilitated, provided that the significant environmental impacts of such operations are contained within the site
- The establishment of outdoor recreation in suitable locations, particularly recreation based on appreciation of the natural or rural environments, is facilitated
- Rural development contributes to the amenity and landscape of the area
- Rural activities are protected from the intrusion of incompatible uses
- Land which has limited agricultural potential, but which is important to the scenic landscape of the City, is retained with a natural character
- Land which is susceptible to flooding or drainage problems, including difficulties associated with high ground water tables is protected from urban or other uses
- Uses identified as inconsistent uses in the Assessment Table dealing with material change of use for the respective Districts are not established in the Rural 1 Planning Area.

Aquis Resort Response	
Performance Criteria	Aquis Resort Response
P1 Site population density must be low to maintain the rural character and the visual qualities of the area.	Inconsistent. The site population will exceed 4 persons per hectare as the use is changing from rural to urban.
P2 The height of all Buildings must be in keeping with the rural character of the surrounding Areas and the height of buildings must not adversely affect visual amenity.	Inconsistent: The height of buildings will exceed the acceptable measure of 8 metres in height.
P3 Buildings must be set back to maintain the rural character of the area; and achieve separation from neighbouring buildings and from road frontages.	Consistent: the site is over 1.5 km from the State Controlled Road. The buildings are over 40 metres from the Yorkeys Knob and Dunne Road local road frontages and over 6 metres from the site boundaries.
P4 Rural activities are protected from the intrusion of incompatible uses.	Inconsistent: the proposal seeks to change the use of the land from Rural (cane farm) to Urban (integrated tourist resort).
P5 Land which has limited agricultural potential, but which is important to the scenic landscape of the City, is retained with a natural character.	Inconsistent: the site is mapped as Strategic Cropping Land and has a primary industry function. The proposal will remove this land use. The development will be visually prominent from several vantage points on the Northern Beaches.
P6 Land which is susceptible to flooding or drainage problems, including difficulties associated with high ground water tables are protected from urban or other uses	Inconsistent: the site is subject to flooding and the proposal seeks to change the land use from Rural to Urban. Flooding and drainage have been investigated for the proposal. (Refer to Chapter 9 (Flooding) and Chapter 11 (Water Quality) of this EIS.)
P7 Development does not adversely affect the amenity of the planning area and adjoining land uses.	Inconsistent: the proposal is a change from the existing rural land use to an urban land use.
Conclusion	Inconsistent

BARRON-SMITHFIELD PLANNING AREA OVERLAY CODES

The table below is a summary of the overlays that apply to the Barron-Smithfield planning area. Where an overlay is applicable to the subject site an assessment the relevant Overlay Code is provided.

TABLE 5-4 OVERLAY MAPS FOR THE BARRON-SMITHFIELD PLANNING AREA

Overlay	Applicability	Aquis Resort Response
Flood Inundation	Applicable	Site is included in the defined flood event 100 ARI (0.1% AEP).
Potential actual sulphate material	Applicable	Site is include in areas containing possible or actual sulphate material at levels < 20 m AHD
Operational Aspects of the Cairns International Airport	Applicable	Site included in the ANEF 20 25 m contour. Primary light control zone D 350 candela (Light Intensity) and area 2 bird and bat strike. Obstacle limitations 90 to 150 metres.

Overlay	Applicability	Aquis Resort Response
Vegetation conservation and significant waterway	Applicable	Site contains vegetation category 1 and 2.
Cycle	Applicable	Site in the vicinity of the Strategic cycle corridor.
Connectivity	Applicable	Perimeter of site adjacent to Richter Creek – open space links.
Road Hierarchy	Applicable	Yorkeys Knob Road is considered a sub arterial road.
Airport Safety	Not applicable	Site not located in the vicinity of the public safety areas.
Bushfire Risk	Not applicable	Site is not located in a bushfire hazard area.
Heritage	Not applicable	Site does not contain any heritage value.
Hill slopes	Not applicable	Site does not contain any hill slopes.
Special Facilities	Not applicable	Site is not listed as a Special Facilities Approval.
Possible Public Transport Corridors	Not applicable	Site not adjacent to a major public transport corridor.

FLOOD MANAGEMENT CODE

Purpose

- All new development has flood immunity from the defined flood event;
- Development on premises will not cause significant adverse impacts on adjoining or other external premises; and
- Development does not adversely impact on ecological functions including water quality or the hydraulic capacity of waterways or other drainage paths; and
- New development does not create an adverse impact on existing properties in the Barron River delta and the values of the Delta are protected.

Aquis Resort Response	
Performance Criteria	Aquis Resort Response
P1. An acceptable level of flood immunity must be provided for new development	All hotels, apartments, casino, swimming lagoon, aquarium, and essential services will be provided a minimum of 500 mm above the PMF level. Suitable emergency services including independent power, water supply, sewerage and communications to support the safe refuge will be provided above the PMF.
P2. An acceptable level of flood immunity must be provided for the access to new development.	With the proposed major upgrade to Yorkeys Knob Road, a 2% AEP trafficable access to and from the site across and out of the delta will be achieved. The main access roads within the site will be to the same standard.
P3. Development on premises does not result in a significant impact on other premises.	Flood modelling has demonstrated that, subject to suitable detailed design, no significant adverse impact of flooding will result from the proposed development and that impacts can be limited to no more than 20 mm. No development other than the lake intake / outlet is proposed within the Richters Creek riparian corridor, and this will consist of a buried pipeline aligned with existing cleared site tracks.
P4. Drainage paths on premises are maintained free of obstruction to permit unimpeded flow of stormwater.	All site areas will be free-draining with the exception of the proposed lake. No works are proposed within major waterways, except for the inlet / outlet structures for the lake exchange system which will be located within Richters Creek.
P5. New development does not create an adverse impact on existing properties within Barron River delta as mapped on the Smithfield – Barron District Flood Inundation (ARI 100 year) Overlay Map.	The proposed development has been demonstrated to show that, subject to suitable detailed design, there will be no significant adverse impact in relation to flooding on existing properties within the Barron River delta.
Conclusion	Consistent

OPERATIONAL ASPECTS OF THE CAIRNS INTERNATIONAL AIRPORT CODE

Purpose

- Ensure that the Cairns International Airport and State significant aviation facilities within the City are protected from the adverse impacts of development.

Aquis Resort Response	
Performance Criteria	Aquis Resort Response
P1 The construction of buildings or other structures does not interfere with the movement of aircraft or the safe operations of the Airport.	<p>Proposed actions:</p> <ul style="list-style-type: none"> • Ensure the design does not incorporate permanent structures that contravene the requirements of CairnsPlan. • Liaise with CAPL, CASA and Airservices Australia to ensure that temporary breaches of height restrictions are complied with. • Develop contract conditions and an EMP (Construction) that ensures that construction activities comply with Code requirements.
P2 Development does not impact on the operational aspects of the Cairns Airport with regard to light emission.	<p>Proposed actions:</p> <ul style="list-style-type: none"> • Ensure that the design complies with the requirements of CairnsPlan, including no upward facing lights, search lights, laser lights, volcanos or flashing lights; no light sources stronger than 450 Candela, no external lighting in parallel lines of between 500 m and 1000 m long and no reflective cladding.
Performance Criteria	Aquis Resort Response
P3 Development and the design of facilities and landscaping in the immediate environs of the airport does not compound the potentially serious hazard from wildlife (bird or bat) strike.	<p>Proposed actions:</p> <ul style="list-style-type: none"> • Ensure the water bodies have steep sides to discourage use by waders. • Develop a concept level wildlife management strategy to implement during operation to minimise the potential to attract high risk birds. • Develop an EMP (Construction) that addresses and minimises the attraction of birds to temporary water bodies that may develop during the construction process.
	<p>The flying fox camp at Yorkeys Knob does not currently pose a risk to aircraft. However, the project could potentially result in a change to the feeding and flight patterns.</p> <p>Proposed actions:</p> <ul style="list-style-type: none"> • Use existing information to determine factors most likely to cause alteration to behaviour of flying foxes and ensure that design elements minimise the risk of altering current behaviour.
	<p>Potential for aquaculture ponds (if retained) to contribute to birdstrike risk.</p> <p>Proposed actions:</p> <ul style="list-style-type: none"> • Drain and fill ponds
	<p>Proposed action:</p> <ul style="list-style-type: none"> • Cover potential food and waste sources to prevent wildlife foraging.

<p>P4 Land uses not directly associated with the Airport are protected from aircraft noise levels that may cause harm or undue interference.</p>	<p>Proposed actions:</p> <ul style="list-style-type: none"> • Incorporate noise mitigation measures into the design of accommodation buildings. • Ensure that aspects of the design do not amplify the volume of noise generated by aircraft (through resonance). • Acoustically insulate to minimum standards required by AS2021.
<p>P5 Emissions do not affect air turbulence, visibility or engine operation in operational airspace.</p>	<p>Proposed actions:</p> <ul style="list-style-type: none"> • Ensure the design does not include structures that emit gaseous plumes at high velocities or excessive smoke or steam. • Develop an EMP (Construction) that includes a detailed dust management strategy to minimise dust emissions from the site during construction. • No gaseous plume at a velocity exceeding 4.3 m/s. • No smoke, dust, ash or steam.
<p>P6 Development does not impact on the operational aspects of the Cairns Airport with regard to light emission.</p>	<p>Proposed actions:</p> <ul style="list-style-type: none"> • Development does not involve external lighting or a road layout that creates straight parallel lines of lighting that is 500 metres to 1000 metres long • Buildings and structures do not contain reflective cladding; upwards shining lights, or flashing or sodium lights.
<p>P7 Development in public safety areas, does not increase the risk to life or property.</p>	<p>Not applicable</p>
<p>P8 Development does not impair the function of the aviation facilities at Cairns Airport, Saddle Mountain, Mt Bellenden Ker and the Northern Beaches (Airservices Aust Ref Nos 452, 453, 462A, 463, 464, 467A, 557, 566 & 1180) by creating physical obstructions, electrical or electromagnetic interference and deflection of signals.</p>	<p>Proposed actions:</p> <ul style="list-style-type: none"> • Ensure the design does not incorporate permanent structures that contravene the requirements of CairnsPlan: <ul style="list-style-type: none"> ○ Building heights to be below OLS and PANS-OPS (varies across site from 50 m to 120 m). ○ At the southern extent of the site (within 4 km of the airport) buildings not to exceed 21 m. ○ Max height of buildings on southern part of island is 62 m. ○ Max height of buildings on northern part of island is 70 m. ○ Consult with Airservices Australia regarding potential for radar shadow. • Allow for construction – i.e. cranes will most likely not be permitted to compromise the OLS. • Liaise with CAPL, CASA and Airservices Australia to ensure that temporary breaches of height restrictions are complied with. • Develop contract conditions and an EMP (Construction) that ensures that construction activities comply with SPP requirements.

Helipad	Proposed actions: <ul style="list-style-type: none"> • Locate the helipad in an area that ensures anticipated flight paths do not pass over residential/public areas. • Ensure that the helipad complies with the requirements of CASA and Airservices Australia.
Conclusion	Consistent

POTENTIAL OR ACTUAL SULPHATE MATERIAL CODE

- Ensure that on premises with the potential to contain acid sulphate soils or premises containing acid sulphate soils development is undertaken so that:
 - The disturbance of acid sulphate soils is avoided; or
 - The generation or release of acid and metal contaminants from acid sulphate soils do not have significant adverse impacts on the natural and built environment or human health; and
 - Reflect State Planning Policy 2/02 Planning and Managing Development involving Acid Sulphate Soils in CairnsPlan.

Aquis Resort Response	
Performance Criteria	Aquis Resort Response
P1 The extent and location of acid sulphate soils or potential acid sulphate soils must be identified.	ASS/PASS mapping has been completed using existing databases, DNRM reports, and fieldwork.
P2 No environmental harm resulting from acid sulphate soils or potential acid sulphate soils exposure is caused.	The fundamental principle is that all areas subject to major earthworks will drain back to the lake which serves as a combined containment and treatment area. There will be no export of acid drainage. (Refer to Section 15.4.3.)
P3 The disturbance of acid sulphate soils or potential acid sulphate soils is avoided or minimised.	A conceptual ASS/PASS handling plan has been prepared based on containment, treatment, and verification. This conservatively assumes that all soils may be ASS/PASS and treats them accordingly. (Refer to Section 15.4.3.)
P4 The release of acid and associated metal contaminants into the environment is avoided or minimised.	The fundamental principle is that all areas subject to major earthworks will drain back to the lake which serves as a combined containment and treatment area. There will be no export of acid drainage. (Refer to Section 15.4.3.)
Conclusion	Consistent

VEGETATION CONSERVATION AND SIGNIFICANT WATERWAY CODE

Purpose

- The protection and enhancement of water quality and conservation values;
- The protection of biodiversity;
- Essential ecological processes are maintained;
- The protection of identified conservation values and connectivity of vegetation communities;
- The prevention of fragmentation, alienation or adverse impacts in vegetation communities; and
- The protection of waterways and riparian corridors.

Aquis Resort Response	
<p>The subject site is identified as being located adjacent to areas that contain vegetation conservation value and significant waterways. The environmental assessment in this EIS addresses the impact of the proposed development on environmental values including vegetation conservation and waterways. Important natural vegetation on this highly degraded site will be retained and new areas established. Water quality will be improved compared to existing cane farm Operations. Overall the environmental performance of the proposed meets the purpose of this code.</p>	
Performance Criteria	Aquis Resort Response
Vegetation Category 3 and Vegetation Category 4	
P1 Development must not unnecessarily affect vegetation conservation values.	The Concept Land Use Plan includes provision for protecting almost all natural vegetation on the site (with the exception of some small infrastructure crossings) but more importantly, the inclusion of 61 ha of new habitat.
Vegetation Category 1 and Vegetation Category 2	
P2 Development does not fragment or alienate areas identified as having key or moderate conservation values	Aquatic and terrestrial connectivity will be maintained within the site by appropriate building setbacks, protection of surface water quality and groundwater quality, and protection of all natural vegetation (Refer to Section 7.2.2.)
P3 Development optimises the viability and connectivity of areas identified as having key or moderate conservation values.	Aquatic and terrestrial connectivity will be reinforced to protect important riparian corridors that ultimately connect the site with the WTWHA (i.e. via Richters Creek and Half Moon Creek). Improved connectivity between the Coral Sea and the Cattana Wetlands will be enhanced due to improvement in the quality and robustness of the Half Moon Creek and Yorkeys Creek corridors. (Refer to Section 7.2.2.)
P4 Development does not adversely affect vegetation conservation values in areas identified as having a key or moderate conservation value.	The Concept Land Use Plan includes provision for protecting almost all natural vegetation on the site (with the exception of some small infrastructure crossings) but more importantly, the inclusion of 56 ha of new habitat with specific ecological objectives. (Refer to Section 7.2.2.)
P5 The riparian corridor adjacent to waterways must be maintained.	All riparian corridors will be retained and reinforced. (Refer to Section 7.2.2.)
P6 Degraded sections of the riparian corridor must be rehabilitated.	All riparian corridors will be retained and reinforced. Refer to the Landscape and Habitat Strategy (Section 23.3.)
P7 The riparian corridor adjacent to waterways must be maintained.	All riparian corridors will be retained and reinforced. Refer to the Landscape and Habitat Strategy (Section 23.3.)

P8 Development of premises adjoining or containing a waterway must not adversely affect the integrity of the waterway or the riparian corridor.	The proposed road access across Yorkeys Creek is designed to align with a natural gap in the vegetation. Traffic safety criteria will dictate where the final road is located but in its design and construction attention will be given to maintain connectivity (i.e. bridges rather than culvert where at all possible).
P9 The ecological values and natural processes of waterways must be protected to maintain or enhance environmental quality and aquatic habitat values.	All riparian corridors will be retained and reinforced. Refer to the Landscape and Habitat Strategy (Section 23.3).
P10 No interference with waterways occurs unless necessary to improve channel stability.	A10.1 No acceptable measures are specified. Minor bank stabilisation works are proposed for an area of Richters Creek that is badly eroded and devoid of riparian vegetation. This site has been selected for the southern lake Overflow in order to maximise use of a degraded area and implement stabilisation works that meets multiple objectives. (Refer to Section 11.3.1 .)
Conclusion	Consistent

LANDUSE CODES

CairnsPlan 2009 contains the following Land Use Codes which detail requirements for specific type of land use across the LGA. The Code applicable to the Aquis Resort Development is the Short Term Accommodation Code. The remaining Land Use Codes are not applicable to the project.

SHORT TERM ACCOMMODATION CODE

Purpose

- Ensure that short term accommodation is consistent with the desired character and amenity of the area and that an acceptable level of facilities is provided for guest of short term accommodation.

Aquis Resort Response	
Performance Criteria	Aquis Resort Response
P1 A site for Short Term Accommodation must have sufficient area and dimensions to accommodate the buildings and other structures, open space, car parking and associated vehicular access.	Complies. The actual building envelopes in less than 20% of the total site area. Parking for the development will be in accordance with CRC's performance requirements in the Car Parking and Access Code. Car parking for the resort complex will be located in basements. It is anticipated that an overwhelming majority of guests staying at the resort will be transported to the facility via Bus/coach. Bus parking will be located within the built form and basements of the hotel, apartments and convention centre. In terms of parking: car parking will be provided to cater for day guests and visitors from the region who choose to travel by vehicle, car parking will be provided to cater for staff needs, and end of trip facilities for staff will be provided to encourage active transport modes for the journey to work.
P2 Short Term Accommodation must be located in areas which offer convenience to residents.	The development is not located near the Cairns CBD, a Sub-Regional centre, District Centre or local centre. It is adjacent to the urban area of Yorkeys Knob and the Smithfield Activity Centre. It is a self-contained resort for guests, well connected to the Cairns CBD and Smithfield via courtesy transport for guests.

P3 Vehicular access to Short Term Accommodation must not adversely affect the efficient functioning of the State-controlled Roads.	Complies. Upgrades to the local and state controlled road network are proposed.
P4 The siting and scale of buildings must be compatible with the desired character of the area and must contribute to the desired amenity of the area.	The development is not consistent with the existing character of the Barron-Smithfield area and the existing rural nature and amenity of the site. The proposal seeks to override the zoning of the planning area from rural to urban, thereby changing the character and nature of the area.
P5 The design and location of buildings must ensure that an acceptable level of privacy is provided to the guests of the Short Term Accommodation	The site layout and final design of buildings will ensure that the habitable rooms of building provide privacy and separation for occupants.
P6 Open space must be provided to meet the reasonable requirements of guests of the Short Term Accommodation for recreational facilities.	The casino and hotels will be surrounded be connected by open space areas with access to the lagoon, golf course, tennis courts, walking/cycling pathways, and outdoor recreational areas. These will be connected by the on-site movement network of roads and pathways between facilities such as the stadium, conference centre and the hotels. Ample open space will be planned for the enjoyment of guests.
P7 Landscaping must be provided to the boundaries of the site to provide a buffer to adjoining uses and privacy for guests of the Short Term Accommodation.	Extensive landscaping of the site will be undertaken to create a sense of place and character for the development. There are no adjoining or adjacent residences to the building sites.
P8 Service facilities must be provided in convenient locations for use by guests of the Short Term accommodation.	Each facility will be full serviced for the convenience of guests.
Conclusion	Consistent – provision of services, landscaping
	Inconsistent – location outside of CBD or other centre and change in character, nature and amenity of the rural planning area.

GENERAL CODES

CairnsPlan 2009 contains the following General Codes which detail requirements for development that is 'assessable' development under the *Sustainable Planning Act (SPA) 2009*.

- Development Near Major Transport Corridors and Facilities Code
- Excavation and Filling Code
- Infrastructure Works Code
- Landscaping Code
- Parking and Access Code
- Reconfiguring a Lot Code.

Assessment of the project against these Codes will form part of the Material Change of Use – Code Assessable Application. The supporting information which will accompany this application will demonstrate how the developed design of the integrated resort will satisfy the performance criteria of each Code.

5.2.4 Conflicts/Inconsistencies

The planning assessments in Sections 5.2.2 (State Planning), 5.2.3 (Regional Planning), 5.2.4 (CairnsPlan 2009) identify a number of areas of conflict and inconsistencies across all three levels of planning instruments.

These may be summarised under the following themes:

- Loss of Primary Production Land (Strategic Cropping Land)
- Economic Diversification
- Pattern of Urban Development
- Rural Planning and Zoning
- Location of Short Term Accommodation.

Table 5-5 sets out these conflicts/ inconsistencies in relation to each of the Planning instruments.

TABLE 5-5 INCONSISTENCIES / CONFLICTS WITH PLANNING INSTRUMENTS

Area of Inconsistency	State Planning	Far North Queensland Regional Plan	CairnsPlan 2009
Loss of Primary Production Land (Strategic Cropping Land)	Module 6: Strategic Cropping Land	Strategic Directions: Rural Production Values Regional Policies: 2.4 Primary Production 5.4 Primary Industries	DEO: Preservation of good quality agricultural land
Economic Diversification		Regional Policies: 5. Economic Diversification	DEO: major economic activity outside of nominated Activity Centres DEO: Tourism based development located outside of nominated tourism areas
Pattern of Urban Development		Strategic Directions: Urban consolidation (outside of nominated urban footprint) Regional Policies: 4. Urban Development (outside of regional activity centre)	DEO: preferred pattern of development (outside of nominated urban footprint)
Rural Planning Area			Planning Area Code (Rural 1): Change of Rural to Urban landuse
Location of Short Term Accommodation			Short Term Accommodation Code: location of development outside of CBD or nominated activity centres and change of nature of rural area

5.2.5 Benefits

The proposed development has the following features/ benefits:

- protection of 53 ha of natural vegetation that is not currently protected against threats from agricultural activities and degradation due to un-managed weeds and pests
- restoration of 56 ha of new habitat
- strengthen degraded waterways, and remove obstacles to fish passage (undersized culverts and tide gates)
- reduction in net export of 133 tonnes of pollutants per year from agricultural activities and opportunity to use treated WWTP effluent with improved water quality outcomes for Great Barrier Reef WHA
- removal of acid drainage from existing watercourses
- preservation and interpretation of biodiversity values
- preservation and interpretation of Indigenous and non-Indigenous cultural values
- reduced risk to aviation (bird strike) and potential river migration due to removal of 6 ha of abandoned aquaculture ponds
- provision of safe refuge for local residents during natural disasters
- regional economic stimulus arising from capital expenditure of \$8.15 billion and annual revenue of \$11 billion/annum
- significant employment in the construction sector over the period 2015-2023
- increase in State Government Revenue of \$1 billion/annum
- 20 000 direct employment and 35 000 indirect employment form Aquis operations
- Establishment of Cairns/Queensland as an international resort destination
- improvements to flood immunity of access to Yorkeys Knob Road.
- utilisation of current surplus capacity at Cairns Airport and tourism infrastructure in the region
- increased sports and recreation facilities for the Yorkeys Knob community
- significant contribution to the development of community sporting and entertainments facilities suitable for an international tourism destination.

In assessing the application for a preliminary approval to override the planning scheme, the CRC will assess whether the benefits of the land use change provide sufficient merit and grounds to justify the development, despite the conflict with the planning instruments.

5.2.6 Compatibility

Planning policy is set by planning authorities in local government planning schemes and pursuant to SPA. These policies have to have a state, regional and local dimension. Planning policy is also expressed through Regional Plans and the State Planning Policy 2013.

Development that is in conflict with, or which seeks to vary planning provisions or detailed performance criteria are approved regularly as the system underpinning SPA allows for a performance approach. It specifically allows for approvals to be given even where conflict is found, provided grounds in the public interest are identified.

In any development application, the strength of alignment with policy and with performance criteria, and just as much, the degree of conflict, will vary from site to site and from project to project.

It is acknowledged in this EIS that certain policy positions, expressed through DEOs or Regional policies, zoning, and performance criteria require the exercise of discretions. Grounds in support are provided throughout the EIS, and all have a direct public interest. Importantly, considerable research has been conducted, commensurate with the scale of this project, to prove alignment with many important policies, in particular water quality and flood mitigation and responsiveness.

While the project will generate new housing, new business, and transport responses outside its boundaries, the proposal will not render the policies that apply locally, or across the region weakened, or in some way necessitate a change to the policy.

In development assessment, and particularly through the Planning and Environment Court and its antecedents, the approach of assessing each site and each application on its merits is well held and of long standing.

Importantly, in a scenario where this development might be approved, good practice would support a separate resolution identifying any conflict, how and why it was varied and upon what grounds in the public interest. This step, routinely applied in Local Government, provides a sound and robust response to any suggestion of a 'precedent'.

5.3 RESIDUAL IMPACTS

Farming is incompatible with the proposed land use and all agricultural use will cease prior to development. The development concept is such that it is not possible to minimise this loss by design.

The mitigation of impacts on SCL involves payment of compensation. In this case, the loss of the land is not able to be mitigated consequently, the residual impact is a loss of 302.7 ha of 'likely SCL' as mapped (186.6 ha of which is currently farmed land).

The Aquis Resort development will require an application for MCU as the subject land is zoned rural. The MCU will need to be assessed against Table 6.1.2 of the State Development Assessment Provisions (SDAP). In terms of the SDAP, the project:

- is in the Management Area (Wet Tropics mitigation zone)
- will have a development footprint >3000 m² permanently impacting SCL or potential SCL (no avoidance or minimisation is possible)
- does not meet any exclusions under SP Regulations (Schedule 13A).

Table 5-6 shows an assessment of the proposal against the Performance criteria and acceptable measure from SDAP Table 6.1.2

TABLE 5-6 ASSESSMENT AGAINST SDAP TABLE 6.1.2

Performance outcomes	Acceptable solutions	Assessment
PO2: The development is for an overriding need and: <ul style="list-style-type: none"> • provides a public benefit • no other site is suitable for the particular purpose. 	No acceptable outcome is prescribed.	<ul style="list-style-type: none"> • The development provides a public benefit in terms of employment, contribution to the local, regional, and state economy. • The assessment of prudent and feasible alternatives* reveals no other site is suitable for the purpose. Other feasible sites on the Barron River delta or south of Cairns are also mapped as SCL.

Performance outcomes	Acceptable solutions	Assessment
The permanent impact on strategic cropping land from the development must be: <ul style="list-style-type: none"> • avoided to the greatest extent practicable • minimised wherever possible. 	AO3.1 The permanent impact is: <ul style="list-style-type: none"> • not located on strategic cropping land, or • co-located with, or adjacent to existing infrastructure. 	Avoidance and minimisation is not possible.
The area of permanently impacted land is identified and a mitigation value is determined.	No acceptable outcome is prescribed.	Mitigation is required based on validated area.

Source: Study team compilation. * The assessment of prudent and feasible alternatives to the Aquis Resort site identifies that all alternative sites on the Barron River delta are also mapped as SCL. (Refer **Section 2.3.2.**)

Under the *Strategic Cropping Land Act 2011* (Qld) (Chapter 5) mitigation is required for the area of SCL as validated under the Regulations. Mitigation can consist of:

- payment of the scheduled fee (currently \$20 000/ha of validated SCL), or
- provision of SCL offsets via a number of mechanisms, or
- a mixture of the two.

The actual value of the mitigation should be based on a zonal criteria validation following the Coordinator-General's report and prior to submission of the MCU. Early engagement with NRM is proposed to allow sufficient time for the process of validation to occur.