

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

VOLUME 1

**CHAPTER 4
DESCRIPTION
OF PROPOSED
PROJECT**

4. DESCRIPTION OF PROPOSED PROJECT

4.1 DETAILED DESCRIPTION OF PROJECT

4.1.1 Project Elements and Features

a) Project Title

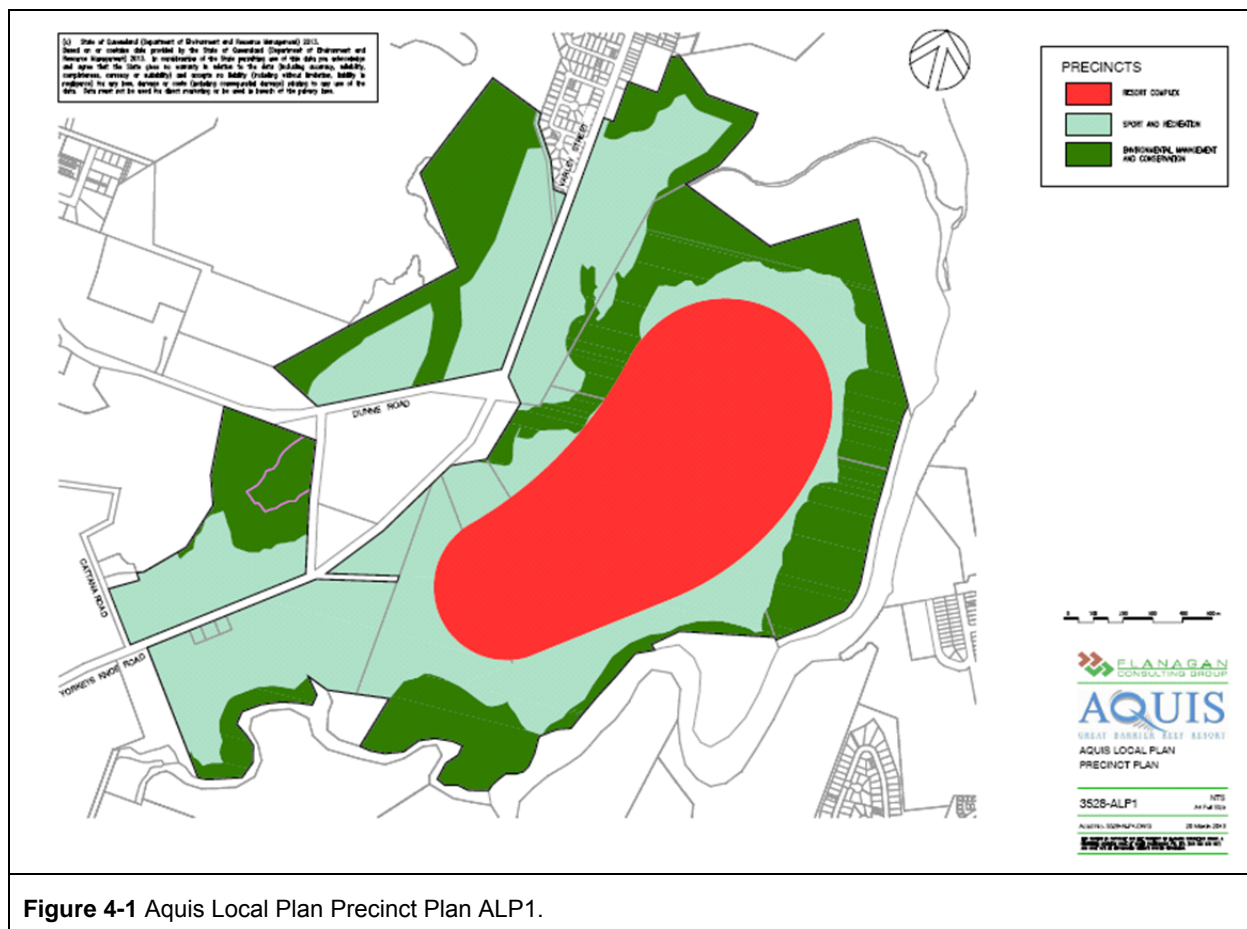
The project is called **Aquis Resort at The Great Barrier Reef** (Aquis Resort).

b) Project Features, Range of Land Uses and Site Layout

Aquis Resort includes:

- Accommodation for up to 12,000 guests (at peak occupancy) in hotel rooms and suites, together with ancillary retail and food and beverage outlets; convention and exhibition spaces; entertainment facilities, including casinos and theatres; an interpretative centre; lagoons and an aquarium; as well as 'back of house' facilities and guest/staff carparking in a **resort complex** precinct.
- An 18-hole championship golf course, tennis centre and other outdoor sports and recreation activities in a **sports and recreation** precinct.
- Protection and enhancement of the remnant environmental values on the site and improved biodiversity and connectivity in an **environment management and conservation** precinct.

The precincts are shown on the Aquis Local Plan Precinct Plan (ALP1) **Figure 4-1**.



The distribution of land uses within the precincts is shown on the Aquis Local Plan Concept Master Plan ALP2 (**Figure 4-2**).

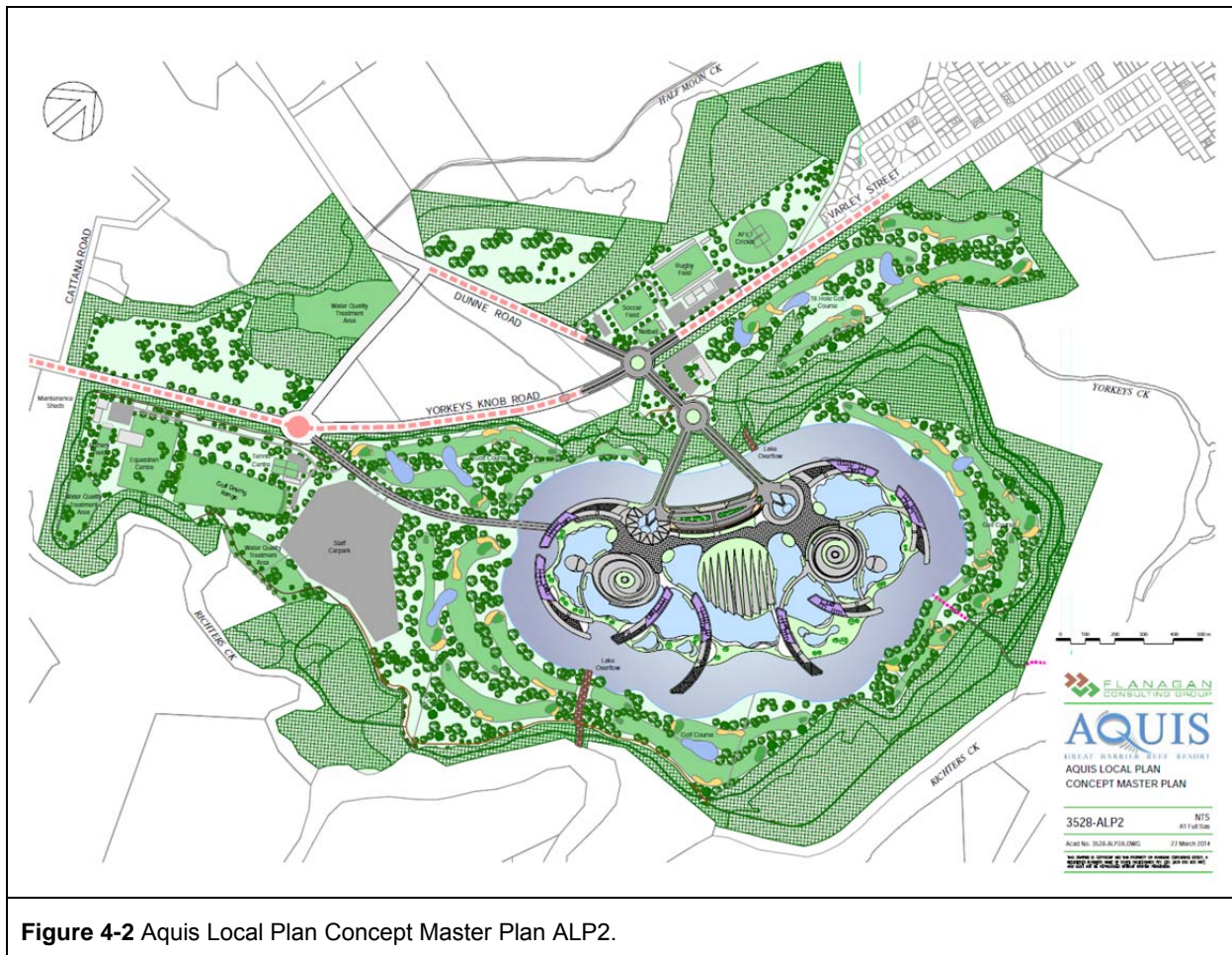


Figure 4-2 Aquis Local Plan Concept Master Plan ALP2.

Aquis Resort involves an anticipated capital investment of **A\$8.15 billion** from 2014 to 2024.

The **Resort Complex Precinct** (73 ha) comprises an 'island' containing the built form of the resort complex approximately 40 ha in size, surrounded by a 33 ha artificial lake.

Table 4-1 sets out the elements of the resort complex precinct.

TABLE 4-1 RESORT COMPLEX ELEMENTS

Element	No	GFA (m ²)
Hotel rooms/suites configured in 8 towers	7500	625 000
Casinos	2	40 000
Convention and exposition	1	23 000
Theatres	2	5000
Retail		10 000
Aquarium	1	2250
Rainforest		2500
Circulation/shared space/back of house/services		350 000
Guest/staff parking	1400	80 000
Landscaping/lagoons/pools/entry water feature		110 000

The aquarium and rainforest are architectural features and not stand-alone uses. The proposal does not include any permanent residential elements.

The 'ground floor' level is on a podium level established at a level of 7.5 m AHD which is above storm tide and tsunami level (refer **Chapter 8** – Coastal Processes) and the Probable Maximum Flood (PMF) for Barron River flooding (refer **Chapter 9** – Flooding). The PMF is a very extreme theoretical flood used for emergency management planning.

The resort complex will be constructed over a 'flood secure' basement level which will incorporate back-of-house support facilities including:

- kitchens
- staff facilities (dining, recreation & training rooms, convenience shopping, medical centre/ staff support centre,)
- stores
- laundry
- refuse collection
- security
- maintenance facilities
- staff and guest parking facilities
- end of trip secure storage /changes facilities for staff using active transport

The built form for Aquis Resort will meet the architectural vision established for the project:

The proposed site for 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 Strait 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:

- *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'.

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.

This very much applies to the Convention and Exhibition component with its organic shell-like roof form integrating strips of green roof to seamlessly blend the building with its surrounding natural beauty.

The total area of the Convention and Exhibition Centre is 35 000 m² on one level comprising Expo Halls, Convention Meeting spaces and ancillary functions of pre-function spaces, retail and food & beverage. The Convention and Exhibition Centre will be at the heart of the whole Resort and will be supported by 7500 hotel rooms in total.

There are three clear span Expo Halls provided each with a footprint of 3900 m² each. The Halls are configured in a way so that they function independently from each other or, via the retraction of operable walls, they can form one large exhibition space of 11 700 m². The Hall spaces can be efficiently and directly loaded / unloaded by trucks accessing the hall spaces themselves with access from the Lower Ground Back of House spaces completely segregated from the Front of House areas. Ample space is provided in the Lower Ground area for the storage of Expo booths and other ancillary components required for a state of the art Expo facility.

The Convention facility comprises four Junior Ballrooms of 1800 m² each which allow multiple configurations. For large gatherings each pair of junior ballrooms can be combined to create two 3600 m² Grand Ballrooms which will rank as amongst the largest in Australia. Equally, each individual junior ballroom, through the reconfiguration of operable walls can be further subdivided into ten 180 m² meeting rooms which can be individually hired. All meeting spaces and ballrooms are serviced via adjacent back of house kitchens and storage facilities which are, again, completely segregated from the front of house areas.

The Expo Halls and Ballrooms are linked in two banks by pre-function areas which are naturally lit by glazed facades which also afford views of the Resort lagoons and the hotel towers beyond. Combining the Expo and Meeting spaces together allow for the hosting of internationally significant scaled events that require the staging of Exhibitions that can be supported by a parallel series of convention meetings and seminars.

The pre-function spaces are integrally linked with the natural flow of circulation between the hotel towers and Grand Lobby entrance spaces for a true Integrated Resort experience. Located

immediately adjacent to the Convention and Exhibition Centre is a series of retail spaces some of which will be tenanted Food & Beverage.

The 600 seat theatres will be used as an Entertainment component but, with appropriate programming, it can also be made available as an additional plenary space to support major conferences.

Figure 4-3 and Figure 4-4 show aerial views of the design response to this vision.



Figure 4-3 Aerial View of Aquis Resort.



Figure 4-4 Aerial View from East.

Figure 4-5, Figure 4-6 and Figure 4-7 show ground level views of the built form from the main entrance, the entry bridge to the resort complex, and a view from the sports and recreation precinct to the south.



Figure 4-5 View from the Main Entrance.



Figure 4-6 View from the Entrance Bridge.



Figure 4-7 View from South.

The arrangement of the built form and relationships between the various components of the resort complex are shown in **Figure 4-8** to **Figure 4-11**.



Figure 4-8 Ground Floor Plan.



Figure 4-9 Lower Ground Floor Plan.

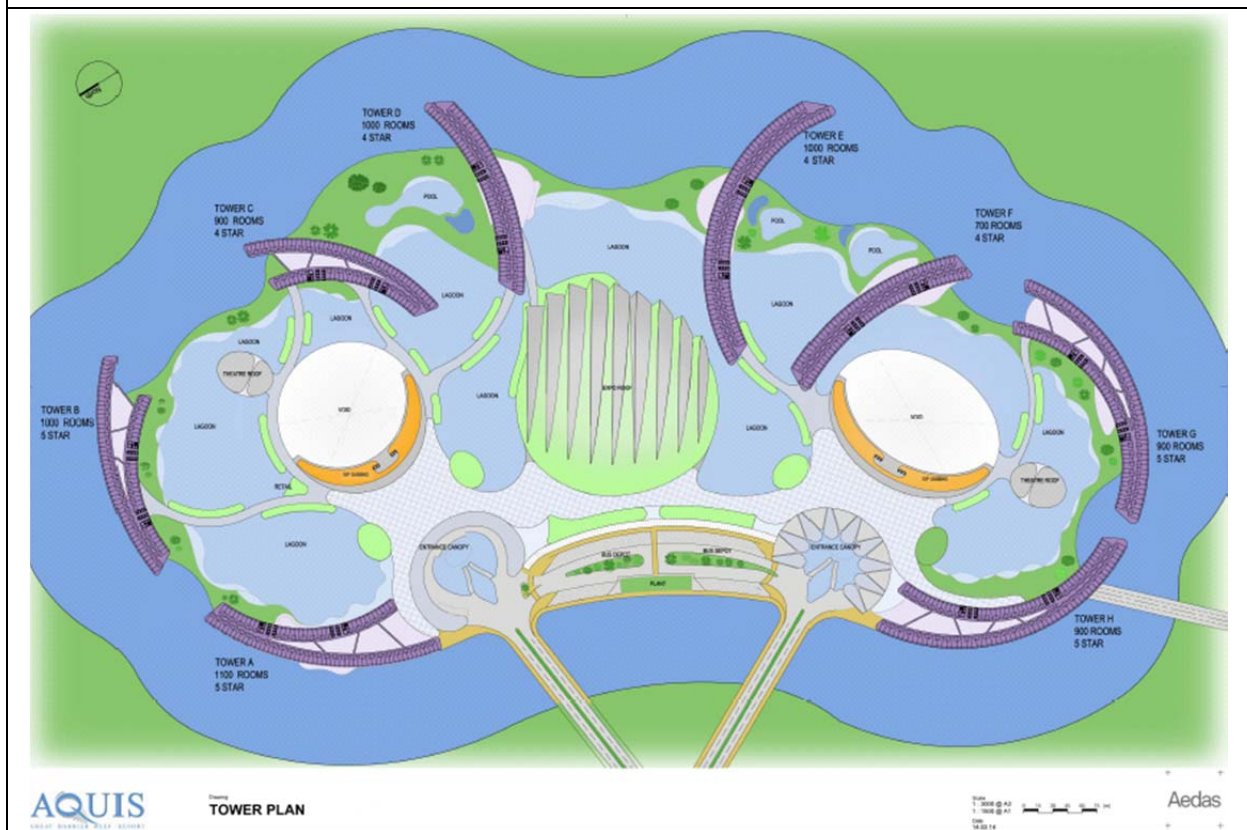


Figure 4-10 Tower Plan.



Figure 4-11 Roof Plan.

The ground floor or podium level will be constructed to achieve immunity from the PMF (6.5 m AHD). Safe refuge above the level of the PMF, or extreme storm surge event, is provided for guests and staff based on a 'shelter-in-place' strategy, supported by emergency power, stores, medical facilities, water supplies and waste storage.

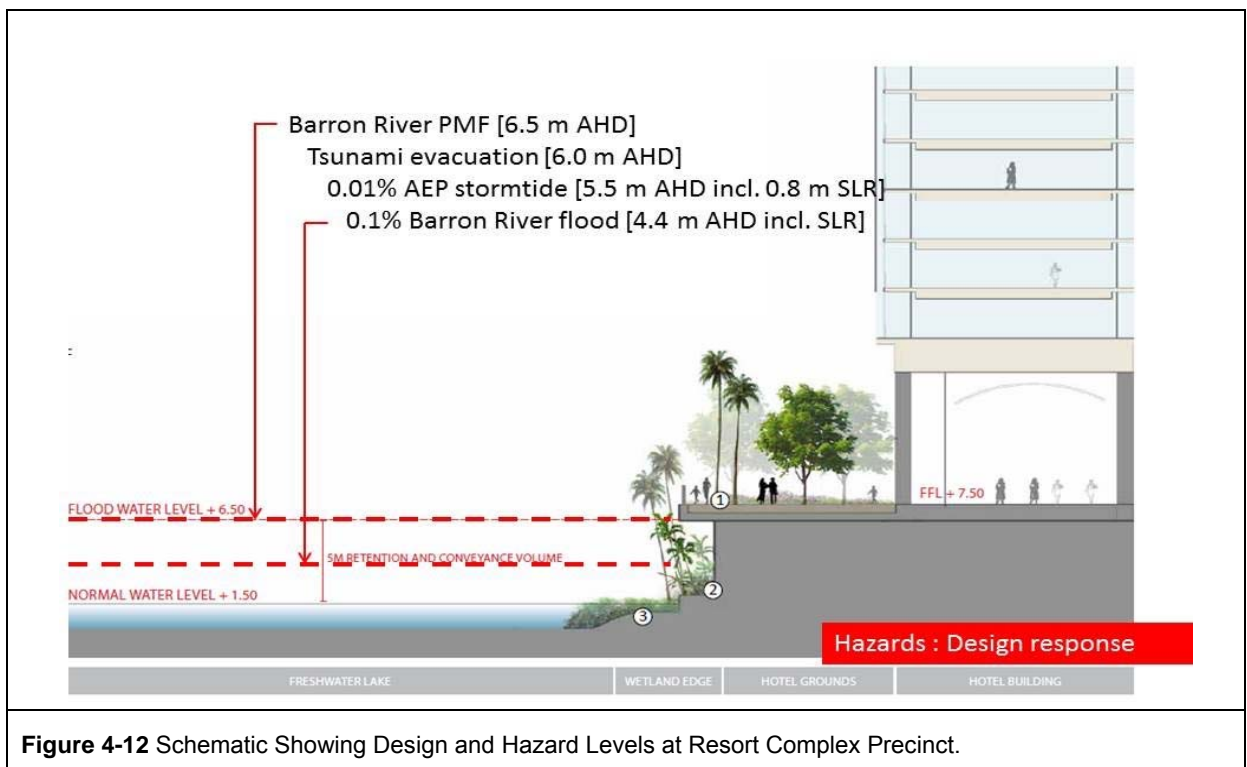


Figure 4-12 Schematic Showing Design and Hazard Levels at Resort Complex Precinct.

The proposal allows for multiple heliports, with at least one of them accessible above the safe refuge level (i.e. flooding, storm tide).

Building heights are limited to a maximum of 65 m above the existing ground level (2.5 m AHD) or below the Obstacle Limitation Surface (OLS) for the Cairns airport, whichever is the lesser.

Figure 4-13 shows some sections through the site and the relationship of the buildings to the OLS.



Figure 4-13 Sections Showing Location of OLS.

To ensure the capacity of the site to convey floodwaters is maintained post-development such that there are no actionable nuisances (i.e. no worsening of flood heights or velocities) caused on adjoining land upstream, downstream or adjacent to the site, the artificial lake provides increased flood capacity to compensate for the raised resort complex. The lake is 'quarantined' from adjacent groundwater through the use of a cut-off barrier of low permeability, to limit interference with groundwater level and quality. To maintain water quality, the lake incorporates a tidal exchange system connected to the Coral Sea via an inlet located 2.2 km off-shore, remote from the turbid zone of the near-shore waters with a diffused outlet discharge to Richters Creek.

Landscaping and buffers are provided within the resort complex and sports and recreation precincts to screen the development from Yorkeys Knob Road and to reduce impacts on, or from, adjacent agricultural land and other uses.

The Sports and Recreation Precinct (155 ha) will include an 18-hole golf course, tennis courts equestrian riding trails and other facilities generally surrounding the resort complex precinct. The sports and recreation precinct also includes an area to accommodate up to 3,000 staff carparks.

In recognition of the limited sports and recreation facilities currently available to the community at Yorkeys Knob, the proposal includes the development of a community sports and recreation facility on land north of Dunne Road and west of Yorkeys Knob Road. The facilities to be provided and the range of uses and sports to be accommodated will be determined through consultation and engagement with the Yorkeys Knob Community during project implementation.

The **Environmental Management and Conservation Precinct** (113 ha) involves the protection and preservation of 53 ha of native vegetation and ecological restoration works and other plantings involve approximately 56 ha of natural vegetation around the perimeter of the site, along Yorkeys Creek and adjacent to Yorkeys Knob Road. These restoration works provide significant protection and enhancement of biodiversity values including maintenance of most natural vegetation; restoration works as buffers to existing natural vegetation; and the removal of waterway barriers to improve connectivity of Yorkeys Creek through to the Cattana Wetlands. The precinct will include opportunity for presentation of biological and cultural heritage values of the site through the provision of walkways, viewing platforms and interpretative displays.

Aquis Resort is not a real estate development. None of its elements will be available for separate ownership. It is a tourism facility and all assets within the facility will be under the ownership of a single entity. There will be no body corporate; however management of individual components of the resort may be under the control of different management entities under contractual arrangements with the resort owner.

Aquis Resort also involves:

- Ancillary infrastructure including internal access roads, water supply mains, sewage pump stations, electrical and communications services infrastructure, administration and maintenance facilities and carparks.
- The upgrading of Yorkeys Knob Road to accommodate the anticipated traffic generated by the development. The upgrade also provides improved flood immunity to reduce the frequency and time of closure due to flood events, which are currently a regular occurring feature of the road.
- The upgrading of Dunne Road to connect it to the inter-suburban road network servicing the northern beaches community at McGregor Road, to cater for likely traffic generated by staff residing on the Northern Beaches.
- Connection to the existing water supply network at the Captain Cook Highway and via Dunne Road to University Reservoir through the provision of dedicated service connections.
- Connection to the Marlin Coast Waste Water Treatment Plant (WWTP) via a trunk rising main from a trunk sewerage pump station dedicated to transfer generated waste water flows.
- A tidal exchange system connected to the Coral Sea via an inlet located 2.2 km off-shore, remote from the turbid zone of the near-shore waters with a diffused outlet discharge to Richters Creek to maintain water quality in the lake.
- The use of treated effluent from the Marlin Coast WWTP for irrigation, landscaping and non-potable uses to reduce demand on the potable water network.

Infrastructure including services, reticulation and drainage structures located within the site will be under the full control and maintenance responsibility of the project owner.

Infrastructure and service connections external to the site will be provided by the proponent and transferred to the ownership of the service provider/network owner.

The upgrading of Yorkeys Knob Road and Dunne Road will be undertaken by the proponent and transferred to the ownership, control, and maintenance responsibilities of CRC. Similarly any connections to the state controlled road network will be constructed by the proponent and will be under the control and ownership of the Department of Transport and Main Roads (DTMR). Services

connections located within the Yorkeys Knob Road Reserve and Dunne Road Reserve will be under the ownership of CRC.

A trunk pump station located to collect wastewater from the development will be located on land dedicated to CRC and the trunk pump station will be under Council's ownership and operational control.

4.1.2 Operations

Aquis Resort is anticipated to attract up to 1,000,000 guests in the accommodation facilities with an average stay of four nights. It is anticipated the mix of accommodation guests will be sourced from the following origins:

- International 74%
- Interstate 9%
- Intrastate 6%
- FNQ Region 11%

The entertainment facilities are anticipated to attract approximately 500,000 visitors annually who will be accommodated elsewhere in the Cairns and TNQ Region.

The overwhelming majority of guests will access the resort via Cairns Airport (international and domestic terminals) and will transfer to the resort via courtesy coaches. A small proportion will travel to the resort using limousines, taxis and hire cars.

The resort complex will be a 24hr, seven-days-a-week facility, with the accommodation and casino operating continuously.

At completion Aquis Resort will provide employment for up to 20,000 operational staff.

The project will create a significant demand for a skilled workforce. The workforce will be sourced from local and regionally based labour pools, with workers being accommodated in the residential areas of Cairns and the region. Skills and labour demands will exceed current local capacity such that workers and their families will relocate to Cairns in pursuit of the employment opportunities that Aquis Resort will present.

Relocated workers will seek accommodation within Cairns and it is likely that accommodation demand could exceed available supply resulting in possible consumption of existing short term accommodation facilities that currently service the tourism sector.

It is anticipated the housing, accommodation and development sector will respond to the prospects of sustainable increased demand for accommodation through the production of new stock. The viability of production of new housing stock is underpinned by the sustainable accommodation demand that will result when Aquis Resort becomes operational.

It is anticipated operational workforce accommodation will be provided by the accommodation market in line with demands, given the following considerations:

- sustainable accommodation demand
- the current stock of approvals for multiple dwellings, subdivision and housing development
- the potential for redevelopment of existing under-utilised (lower density) areas
- the five year lead time until workforce accommodation demands will eventuate
- The market's response to construction workforce accommodation demands.

The proponent will partner with CRC and the property development industry to develop a housing and accommodation plan.

Car parking for the facility is in accordance with CRC's performance requirements in the *Car Parking and Access Code*. Car parking for guests and staff of the resort complex will be located in basements. It is anticipated 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.
- End-of-trip-facilities for staff will be provided to encourage active transport modes for the journey to work.
- Carparking will be provided in the basement of the resort complex (1400 spaces) with an area available in the sports and recreation precinct available to accommodate up to 3000 vehicles for staff parking.

4.1.3 Concept Design Refinement

a) Design Refinement Process

The conduct of the EIS has provided the proponent with the opportunity to refine the initial concept through detailed consideration of the outcomes of investigations undertaken in order to establish potential project impacts as well as feedback from the Community. The design refinement process has been driven by an objective to avoid potential impacts where possible and at least minimise impacts to the greatest extent possible through design or reconsideration of project elements.

As part of the conduct of the EIS, there have been detailed investigations of the site's values (including flora, fauna, cultural heritage) and the site's characteristics (in relation to soils, climate, groundwater) as well as exposure to hazards (such as flooding, coastal erosion, and river migration).

As well as these technical considerations, the initial concept plans have been exposed to the community to gauge community response and to use community feedback to influence the advancement of the concept design.

As a consequence of these activities, including the conduct of multiple runs of the flood model and water quality modelling to establish minimum footprint of the project site, the concept design has been modified reflect the sites values, mitigate risks, and address concerns expressed by some members of the community.

b) Changes to Project Concept

Table 4-2 summarises the main differences between the Initial Concept as depicted in the IAS and the Aquis Concept Master Plan (ALP2) which defines the project for which approval is being sought.

TABLE 4-2 COMPARISON OF INITIAL CONCEPT AND AQUIS MASTER LAND USE PLAN

Initial Concept (July 2013)	Aquis Concept Master Plan (April 2014)	Reason for Change
A resort consisting of a range of accommodation and ancillary facilities catering for short stay tourists including the following:	A resort consisting of a range of accommodation and ancillary facilities catering for short stay tourists including the following:	.
Accommodation		
3750 hotel rooms in 9 towers. 1.5 beds/room =5625 beds	7500 hotel rooms in 8 towers. 1.5 beds/room =11 250 beds	Accommodation format rationalised to focus on short term accommodation for target market.
1200 centrally managed apartments (27 stories). 2.5 bedrooms x 1.5 beds =5250 beds	No serviced apartments proposed.	Large apartment building located at the north of the site deleted due to community concerns about the bulk, scale and height of the building and its proximity to existing residential properties at Yorkeys Knob.
135 centrally managed villas 4 bedrooms x 1.5 beds = 810 beds	No centrally managed villas proposed.	Villas deleted as inappropriate form of accommodation for short term stay customers. Villas too remote from central facilities and complex island layout impeded lake water quality performance.
Total beds =11 600 beds	Total beds= 11 250 beds	Resort peak guest capacity slightly reduced
The proposal does not include any permanent residential elements.	The proposal does not include any permanent residential elements.	No change.
1800 staff accommodation units.	No staff accommodation proposed.	Deleted. Preference is for staff to be sourced from and accommodated in the local community, to make use of local accommodation for staff and provide opportunity for local investors to develop more local accommodation capacity.
Ancillary Facilities		
13 500 m ² of high-end retail shopping restaurants, bars and food and beverage outlets.	10 000 m ² of high-end retail shopping restaurants, bars and food and beverage outlets.	Areas adjusted to reflect financial model.
An international class casino.	An international class casino.	No change.
One of the world's largest aquariums.	One of the world's largest aquariums.	No change.
2 x 2500 seat theatres.	2 x 600 seat theatres.	Scale reduced.
13 ha reef lagoon as a central feature.	12.4 ha reef lagoon as a feature.	Form change and will incorporate water recreation facilities.
A 65 ha lake surrounding the built form [eastern lots].	A 33 ha lake surrounding the built form.	Lake reconfigured based on flood modelling, water quality and ecological criteria.

Initial Concept (July 2013)	Aquis Concept Master Plan (April 2014)	Reason for Change
A 45 000m ² convention and exhibition centre.	A 25 000m ² convention and exhibition centre.	Size reduced to reflect financial model Relocated to central facility in resort complex.
A cultural heritage centre	A cultural heritage centre located within hotel complex.	No change site will incorporate interpretive infrastructure (paths and viewing platforms).
A 13 ha water park (1)	No standalone water park proposed. Themed recreation features included in lagoons.	Deleted so as to remove competition with existing planned facilities.
Ancillary facilities including access roads, water supply mains, sewage pump stations and electrical, communications services infrastructure, administration and maintenance facilities.	Ancillary facilities including access roads, water supply mains, sewage pump stations and electrical, communications services infrastructure, administration and maintenance facilities plus water quality improvement devices and carpark.	No change.
Upgrade of external trunk services and associated infrastructure including water supply, sewerage, electrical and communications to cater for anticipated demands from the development.	Upgrade of external trunk services and associated infrastructure including water supply, sewerage, electrical and communications to cater for anticipated demands from the development.	No change.
Upgrade of external local and state controlled road networks to cater for the anticipated traffic generation and transport needs.	Upgrade of external local and state controlled road networks to cater for the anticipated traffic generation and transport needs.	No change.
Sports and Recreation Facilities		
115 ha outdoor sports and recreation facilities including an 18-hole championship golf course including driving range and club house.	155 ha outdoor sports and recreation facilities including an 18-hole championship golf course including driving range and club house and other outdoor recreation facilities such as equestrian trails and tennis courts.	Increased open space and facilities including a community sports and recreation precinct located on land west of Yorkey's Knob Road and North of Dunne Road.
Environmental Management and Conservation		
Restoration and ecological plantings (not specifically shown).	113 ha ecological restoration works involving planting of 56 ha of natural vegetation around the perimeter of the site, along Yorkeys Creek, and along the eastern frontage of Yorkeys Knob Road including boardwalks, viewing platforms and interpretive facilities. Removal of two flood gates on the site and the upgrading of undersized culverts on Yorkeys Knob road to improve aquatic connectivity.	Areas specified.

Initial Concept (July 2013)	Aquis Concept Master Plan (April 2014)	Reason for Change
Built Form		
60 ha footprint of built form	40 ha footprint of built form.	Reduction.
60% site cover (including lake)	33% site cover (including lake).	Reduction.
40% open space	67% open space.	Increase.
Max building height 80 m	Maximum building height 65 m.	Reduction.
32 pph density (at 1.5 persons /bedroom)	33 pph density (at 1.5 persons / bedroom).	Slight increase.

Changes to major project elements are shown on **Figure 4-14**.

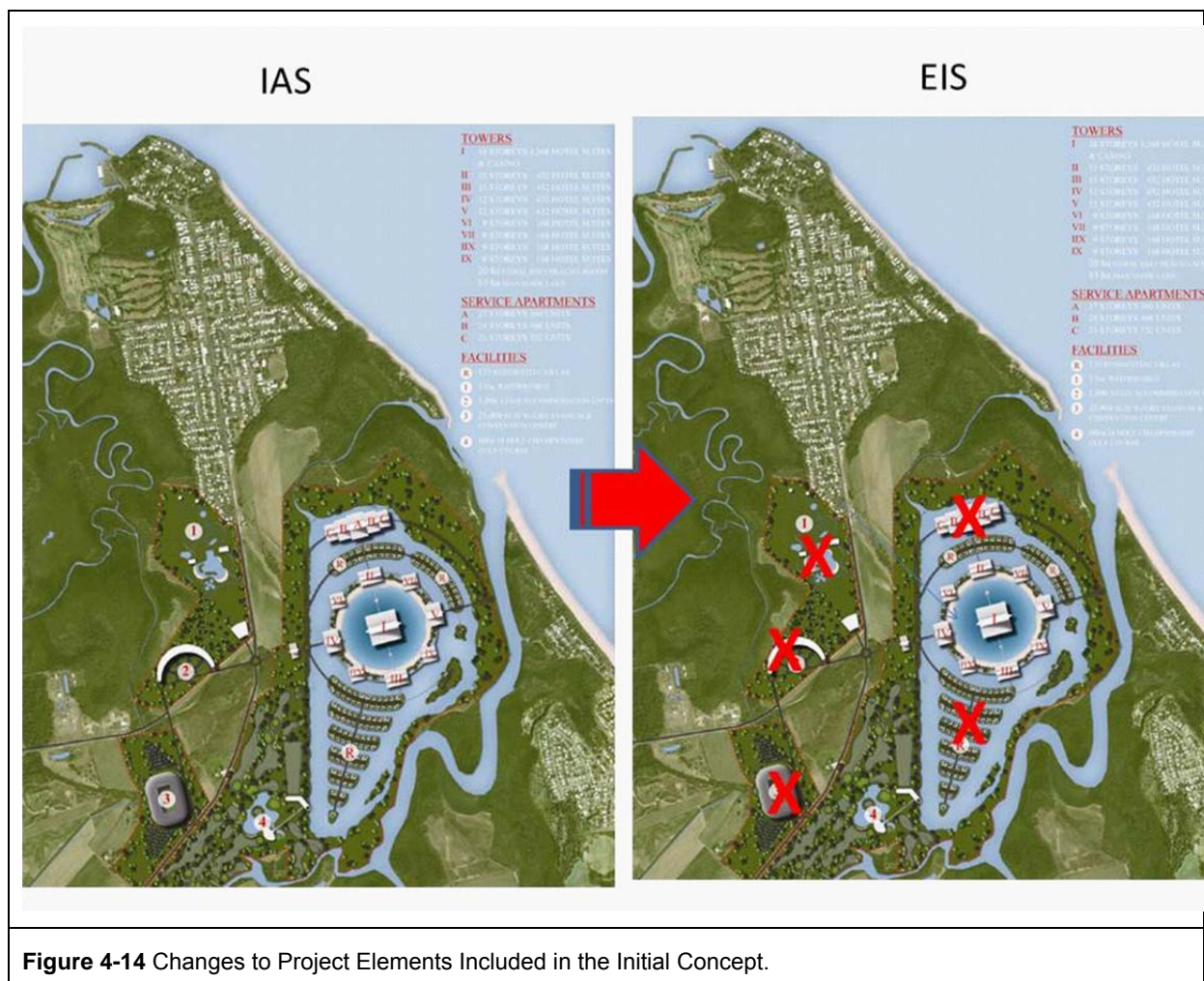
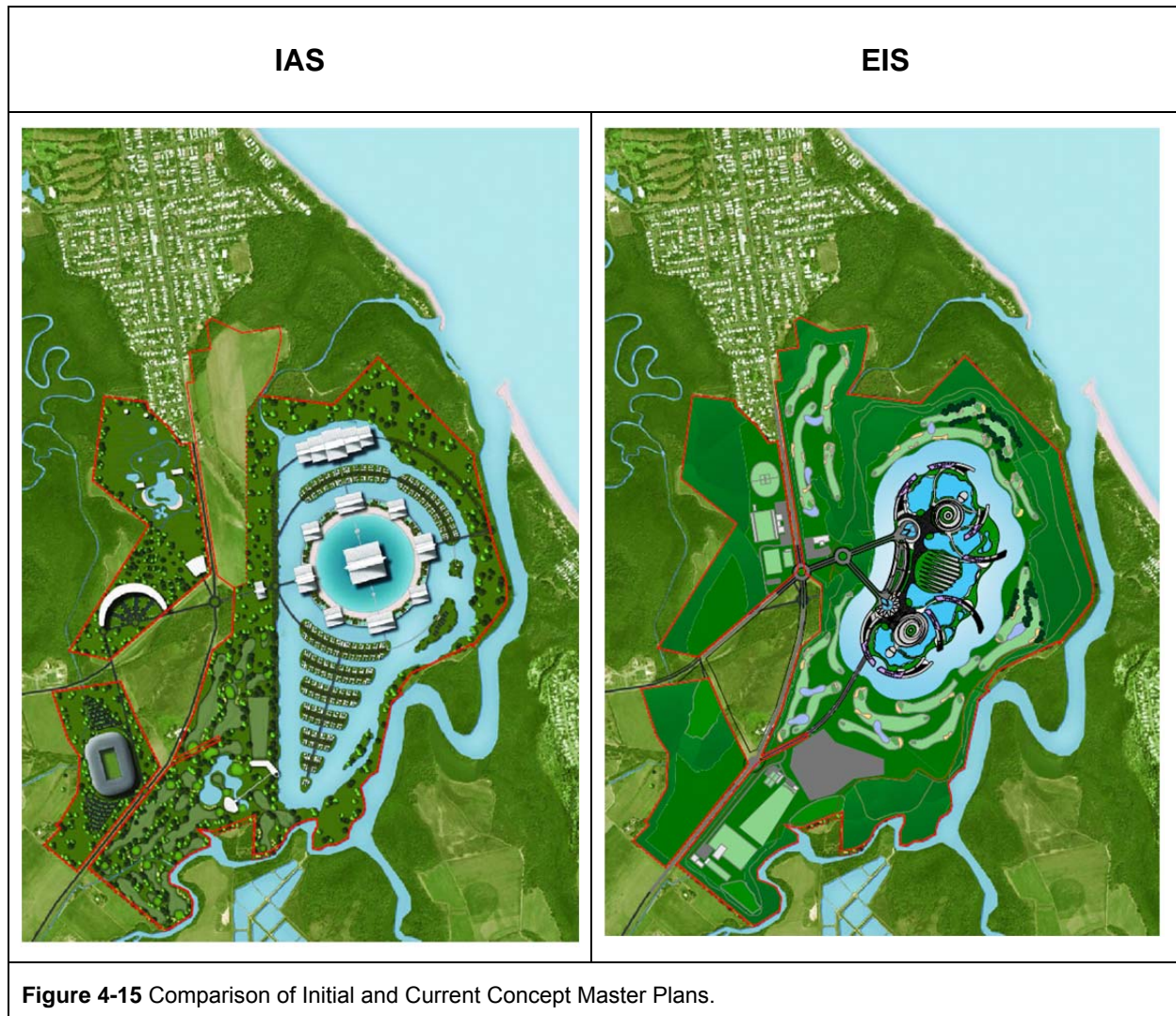


Figure 4-15 shows a comparison between the Initial Concept Plan and the current Aquis Concept Master Plan.



4.1.4 Environmentally Sustainable Development

According to Australia's 1992 *National Strategy for Ecologically Sustainable Development* (Department of the Environment 2013) ecologically sustainable development (ESD) is 'using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased'.

The Strategy includes a goal, core objectives, and guiding principles as noted below.

- **Goal:** Development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.
- **Core Objectives:**
 - to enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations
 - to provide for equity within and between generations
 - to protect biological diversity and maintain essential ecological processes and life-support systems.

- **Guiding Principles:**

- Decision making processes should effectively integrate both long and short-term economic, environmental, social and equity considerations.
- Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
- The global dimension of environmental impacts of actions and policies should be recognised and considered.
- The need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection should be recognised.
- The need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised.
- Cost effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms.
- Decisions and actions should provide for broad community involvement on issues which affect them.

The 1992 strategy was given effect in a slightly modified form in the EPBC Act (Section 3A) as follows:

- Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations (the 'integration principle').
- If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (the 'precautionary principle').
- The principle of inter-generational equity – that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations (the 'intergenerational principle').
- The conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making (the 'biodiversity principle').
- Improved valuation, pricing and incentive mechanisms should be promoted (the 'valuation principle').

Under the EPBC Act, the ESD strategy applies to Commonwealth agencies (i.e. not private developers) that need to report against two core criteria:

- how agencies accord with and contribute to ESD, and
- to report the environmental performance of agencies, that is the impact their activities have on the natural environment, how these are mitigated and how they will be further mitigated.

The EPBC Act defines the 'environment' to mean:

- ecosystems and their constituent parts, including people and communities
- natural and physical resources
- the qualities and characteristics of locations, places and areas
- heritage values of places (including places on the Register of the National Estate kept under the Australian Heritage Council Act 2003), and
- the social, economic and cultural aspects of the things mentioned above.

Aquis Resort's response to ESD

In practical terms, the application of ESD to the Aquis Resort development has been addressed through the following:

- protection of terrestrial and aquatic habitats, species, and ecological processes to the greatest extent possible and where practical, the enhancement of these values (refer to **Chapter 7 – Flora and Fauna**)
- protection of the values of surface water and groundwater and where practical, the enhancement of these values (refer to **Chapter 10 – Water Resources**)
- the wise use of natural resources, especially the use of any soil to be removed for beach replenishment and other beneficial uses (refer to **Section 4.2.5**)
- a raft of sustainability initiatives to reduce energy consumption, conserve water, reduce waste, and re-use materials where possible (refer to **Chapter 25 – Solid Waste**)
- vegetation screening and other strategies to limit visual impacts (refer to **Chapter 6 – Landscape and Visual**)
- protection of indigenous and non-indigenous cultural heritage values (refer to **Chapter 21 – Cultural Heritage**)
- interpretation and education programs to present natural and cultural values (refer to **Section 4.1.1**).

Areas where the proposed development will result in unavoidable impacts that may not be consistent with the principles of ESD are:

- alienation of Strategic Cropping Land (i.e. a natural resource (refer to **Chapter 5 – Land Use**))
- the quality of the (rural) landscape (whilst some mitigation is possible the project will involve a fundamental change in land use (refer to **Chapter 6 – Landscape and Visual**))
- the net production of greenhouse gases by virtue of construction, operation and overseas air traffic (refer to **Chapter 16 – Air Quality**).

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.

4.2 CONSTRUCTION PROCESS AND PROGRAM

4.2.1 Sequencing and the Staging of Activities

It is the proponent's intention for development to be constructed in two stages in 2014-2018 for Stage 1 and 20120-2024 for Stage 2. The elements, capital expenditure and timing for each stage are shown in **Table 4-3**.

TABLE 4-3 RESORT COMPLEX ELEMENTS FOR EACH STAGE

	Stage 1		Stage 2	
Capital Expenditure	\$5.05B AUD		\$3.10B AUD	
Operational staff	11 000		9000	
Construction labour	3750		3500	
Timing	2014-2018		2020-2024	
Element	No	GFA (m²)	No	GFA (m²)
Hotel rooms/suites configured in 8 towers	4000	330 000	3500	295 000
Casinos	1	20 000	1	20 000
Convention and exposition	1	23 000		
Theatres	1	2500	1	2500
Retail		6100		3900
Aquarium	1	2250		
Rainforest			1	2500
Circulation/shared space/back-of-house/services		230 000		120 000
Guest/staff parking	1070	45 000	330	35 000
Landscaping/lagoons/pools/entry water feature		110 000		

Figure 4-16 to Figure 4-20 show the configuration of Stage 1.





Figure 4-17 Ground Floor Plan Stage 1



Figure 4-18 Lower Ground Floor Plan Stage 1



Figure 4-19 Tower Plan Stage 1



Figure 4-20 Roof Plan Stage 1

Figure 4-21 shows a preliminary construction schedule for a construction period commencing in May 2015 to achieve construction completion by the target commencement of operations for Stage 1 in late 2018.

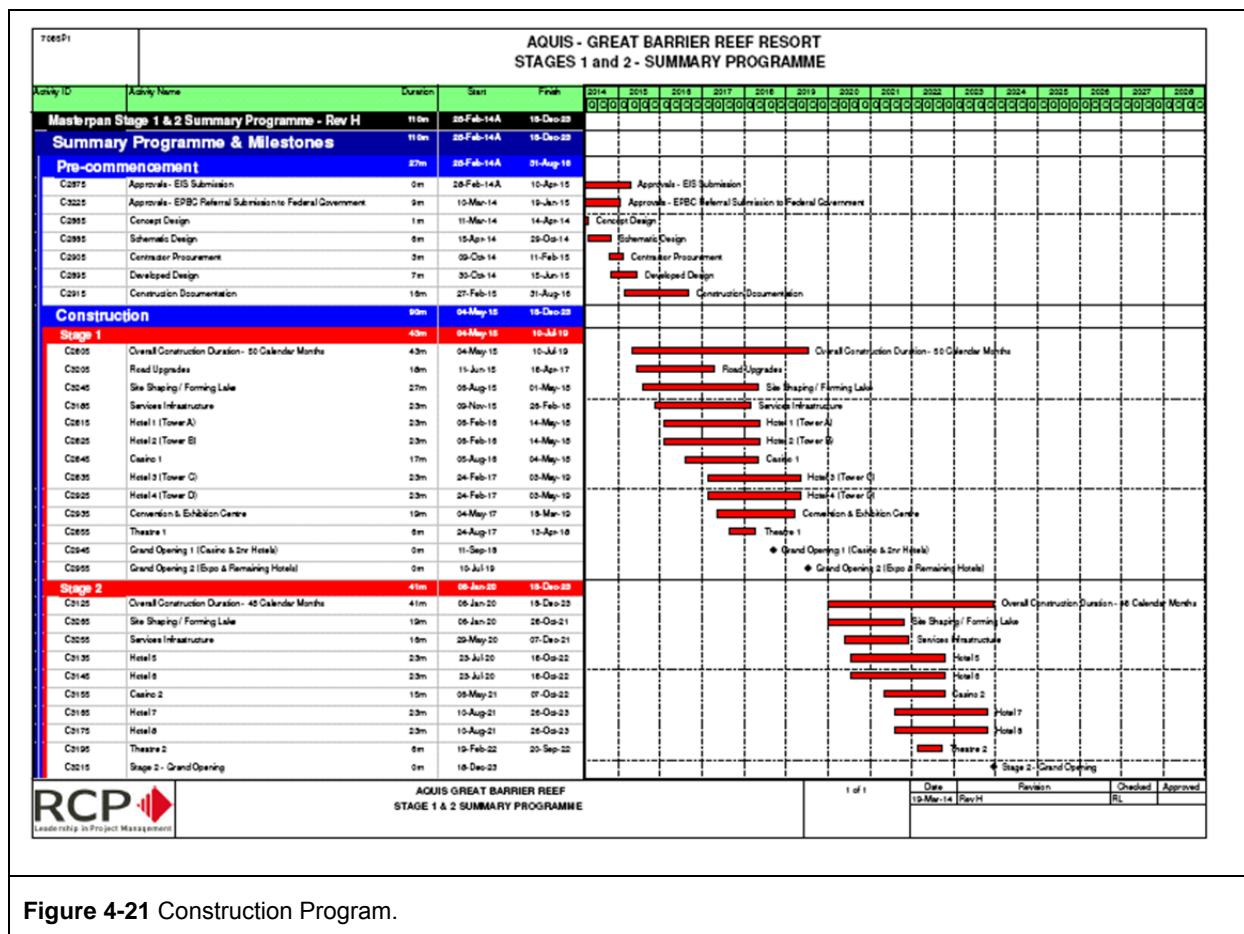


Figure 4-21 Construction Program.

There are three distinct construction elements: external works, site works, and building works.

External Works

The external works relate to upgrades to the external roads and the services connections to water supply, non-potable water supply, and sewerage treatment plant. The external works are scheduled to ensure water supply and sewerage are available to the site relatively early in the construction period, prior to the bulk of the building works starting, which is when site construction workforce will peak.

It also allows for the upgrades to the roads and access to the site prior to peak building works, which will be when peak construction traffic is generated.

Site Works

This relates to the bulk earthworks, site shaping, roads and landscaping, as well as the golf course.

The lake functions as a flood channel, and is required to be at least as deep as the ground water level prior to the building footprint for the resort complex rising above natural ground level, i.e. before there is a restriction to flood flows on the flood plain.

The ground water cut-off barrier is required to be constructed prior to the lake being made deeper than the ground water level. The lake is progressively deepened to its final level in parallel with the construction of the building works.

In parallel with the earthworks the ASS / PASS treatment (neutralisation of acid-generating potential) happens on-site and the excess spoil (2 million m³) is progressively transported off site for beneficial reuse.

Environmental planting will occur progressively over the construction period. Landscaping, paving and finish works will be implemented towards the end of the construction period for each stage.

Building Works

This involves the building of the island from basements up to podium level, prior to construction of the buildings above the podium.

The finishing/fit-out occurs on a 'just-in-time-delivery' prior to opening.

A key issue is risk of building on the flood plain. This means until the flood channels are built, there will be a limit to the extent that earthworks and materials can be stockpiled on-site during high flood risk periods (January to May). Once the central island footprint is constructed and the flood channels are in place, the building works can be undertaken from within the podium footprint. There is enough room on the flood immune podium (approx. 40 ha) for lay-down, material stockpiles/storage, deliveries etc.

4.2.2 Pre-Construction Activities

Subsequent to the receipt of land use approval (**Section 4.6**), detailed design activities will commence for the design of external works (road works and service connections), as well as the design development and documentation for the resort complex and golf course. Cane farming operations on the land will cease. There is limited clearing required as the built footprint will occupy areas that are currently under cane cultivation. The proposed development footprint is located clear of native vegetation and no interference with current watercourses or wetlands is proposed.

Initial works on-site will include the establishment of construction facilities, including construction offices and contractor lay-down areas, concrete batching plant, material stock piles etc., as well as site set-out and the establishment of haul roads and construction site accesses.

4.2.3 Existing Infrastructure and Easements

Existing improvements to the site include some dwellings and rural facilities such as plant sheds, which will be demolished and removed. Existing infrastructure on the land includes a private cane rail siding and cane rail line. Due to the cessation of cane farming operations, these facilities are no longer required and will be removed from the site.

The existing drainage easement located at the northern end of the site, west of Yorkeys Knob Road and north of Dunne Road, will be maintained and will not be disturbed.

4.2.4 Proposed Construction Methods

Construction will involve conventional techniques for civil works and building construction. These will include earthworks using earthmoving equipment for the purpose of land shaping and site layout. On-site treatment/neutralisation of potential acid sulphate soils will be required prior to export of excess material for beneficial reuse. The site will include an on-site batching plant for concrete production and a facility for the screening of sands excavated for reuse for concrete manufacture. It is likely buildings will be on piled foundations and conventional piling techniques will be a feature of the development.

The construction of high-rise buildings will involve conventional construction techniques including steel fixing, form working, concrete pouring and finishing and masonry works. The construction of tall buildings will involve tower cranes for the vertical transport of materials to the construction front.

4.2.5 Beneficial Reuse and Disposal Options for Surplus Excavated Material

The construction of the flood channels/lake will result in a surplus of material over and above that required to create the platforms and to achieve flood immunity levels for the built form. A significant proportion of the excavated material will be coarse sand suitable for reuse in the production of concrete. Construction activities will involve the establishment of a screening plant on-site for the purposes of reuse of excavated material in concrete production.

The quality of materials excavated from the site will also meet CRC's requirements for sand for replenishment of the Northern Beaches. Consultation with Council indicates there is a demand for stock-piling of sand resources for future beach replenishment requirements. Beneficial reuse of excavated sands for beach replenishment will be discussed with CRC as part of construction planning. Materials not suitable for reuse in concrete production and beach replenishment will be directed towards embankment filling to improve immunity on Yorkeys Knob Road.

North Queensland Airports (NQA), the operator of Cairns Airport, has expressed interest in the use of excess material generated from the Aquis Resort site for the purposes of filling and surcharging areas earmarked for future development under the Cairns Airport Land Use Plan. The airport can accommodate more than the amount of excess material generated from the Aquis Resort site. Any surplus material over and above that required for reuse on-site, beach replenishment or embankment filling for external connections, can be used for filling existing voids resulting from previous sand extraction activities on the Barron River delta. Acid sulphate soils will be neutralised on-site prior to export for beneficial reuse. Refer correspondence from CRC and NQA shown in **Figure 4-22**.



Figure 4-22 Correspondence from CRC and NQA.

4.2.6 Hours of Operation

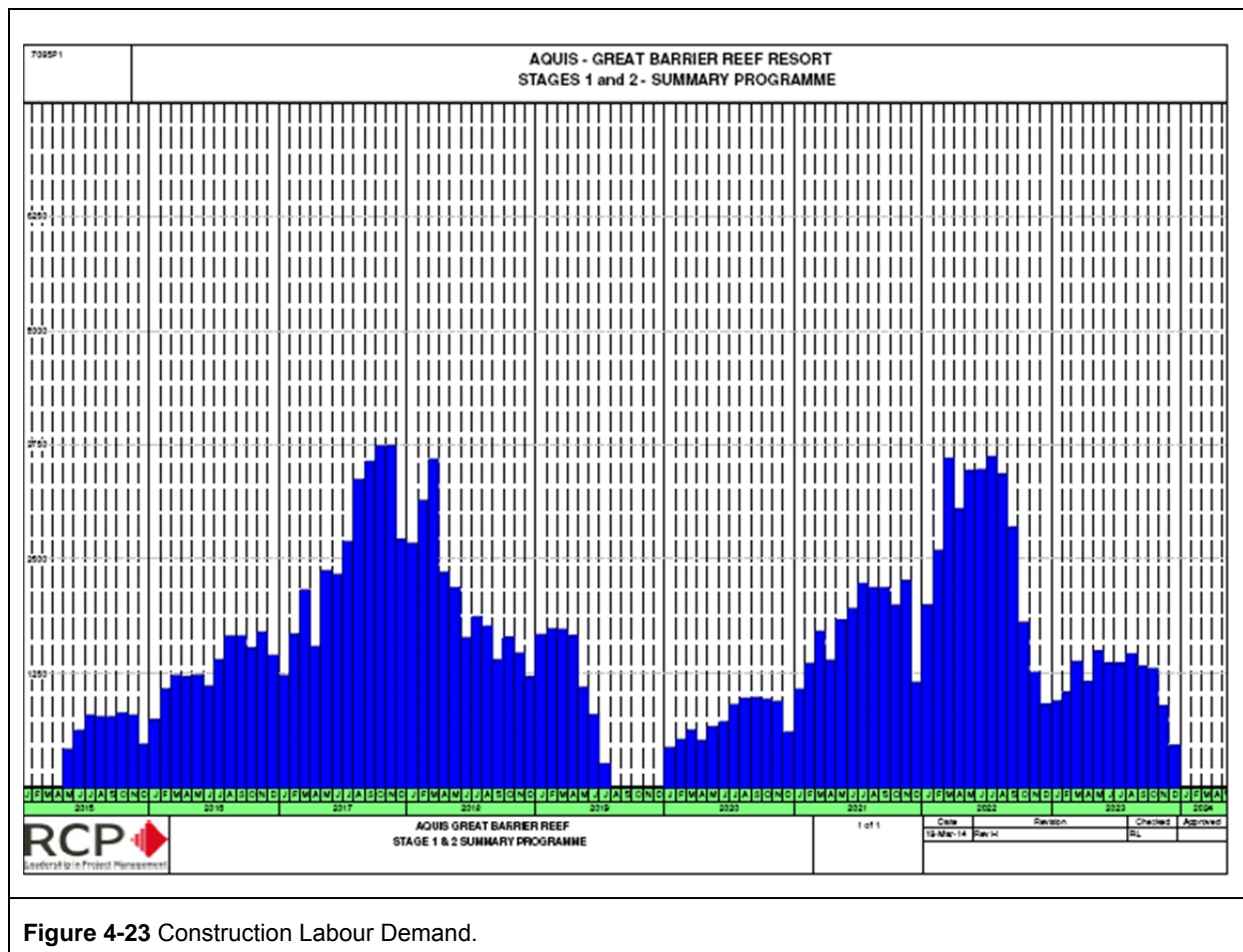
Construction activity will be undertaken during normal working hours for construction. Any construction activities outside normal hours will comply with the prescribed noise standards under the *Environmental Protection Act*. Haulage of excess excavated material from the site to Cairns Airport may be scheduled to occur outside peak traffic hours to minimise impacts on traffic on the Captain Cook Highway.

The proponent understands that the conduct of construction activities outside normal construction industry hours will be required to conform to the duty of care to not cause an environmental nuisance with respect to noise, vibration or air quality.

4.2.7 Workforce Accommodation

The project will create a significant demand for skilled labour during construction. Construction of Stage 1 will involve a peak construction workforce of approximately 3750 anticipated in late 2017. Construction of Stage 2 will involve a peak construction workforce of approximately 3500 anticipated in mid-2022.

The construction labour demand for both stages is shown in **Figure 4-23**.



Initially, the construction workforce will be sourced from local and regionally based labour pools, with workers being accommodated in the residential areas of Cairns and the region. When skills and labour demands on-site reach peak levels, it is likely the workforce will be made up of workers that relocate to Cairns for the duration of the construction period.

Relocated workers will seek accommodation within Cairns and it is likely that demand could exceed available supply and possible consumption of existing short term accommodation facilities that currently service the tourism sector.

It is anticipated that the housing, accommodation, and development sector will respond to the prospects of sustainable increased demand for accommodation through the production of new stock. The viability of production of new housing stock is underpinned by the sustainable accommodation demand that will result when Aquis Resort becomes operational, as the operational workforce (20 000 staff) significantly exceeds the peak construction workforce.

This can be contrasted with resource projects where peak construction workforce accommodation demand significantly exceeds operational workforce demand, because operational staffing levels are generally a relatively small proportion of peak construction workforce numbers. The usual response in such circumstances is the provision of temporary construction workforce camps to cater for Fly-in-Fly-out (FIFO) construction workforce.

It is anticipated construction workforce accommodation will be provided by the accommodation market in line with peak demands, given the following considerations:

- sustainable accommodation demand
- the current stock of approvals for multiple dwellings, subdivision and housing development
- the potential for redevelopment of existing under-utilised (lower density) areas
- the two year lead time until peak workforce accommodation demands will eventuate.

The proponent will partner with CRC and the property development industry to develop a housing and accommodation plan, which will identify construction (and operational workforce) accommodation demands, with sufficient lead times to allow for market response.

4.2.8 Capacity of Plant and Equipment

It is premature at this stage of the approval process to prescribe the actual plant and equipment that will be utilised during construction. Construction activities and the likely equipment to be used on-site *may* include:

- earth moving equipment within the site, and trucks to remove material from site
- equipment associated with piling, including:
 - injection grouting equipment
 - sheet piling (installation and removal)
 - bored piling, including concrete pumps, mobile cranes, water sedimentation tanks and pumps, and ground water pumps
 - load testing and coring equipment for pile testing
- delivery vehicles bringing various materials and items of equipment, and removing equipment afterwards
- concrete batching plant(s), concrete trucks and concrete pumps
- delivery trucks for materials, precast, prefabricated and other bulky items
- mobile generators
- mobile cranes, tower cranes, mobile hydraulic hoists
- ground water pumps associated with general site works
- equipment associated with the delivery and hoisting of large items of equipment and plant, such as lifts, escalators, mechanical and electrical plant, chillers, TX units etc.

It is noted that construction activities (with the exception of external works, road works, and pipe laying), will be contained within the site and will be focused on the resort complex precinct. The operation of high impact plant and equipment will be confined to normal operating hours and their operations will be governed by the proponent's environmental duty to cause no environmental nuisance or harm with respect to noise, air and vibration.

4.2.9 Location of New and Altered Works and Structures

Existing infrastructure likely to be impacted by the proposed development will include the proposed upgrade of Yorkeys Knob Road to improve its traffic carrying capacity and flood immunity, and the provision of increased capacity on Dunne Road. The construction of services connections, including connections to the water supply network at Caravonica and to the Marlin Coast treatment plant at Dunne Road, will be undertaken entirely within the Yorkeys Knob and Dunne Road Reserves.

4.2.10 Environmentally Relevant Activities

Likely Environmentally Relevant Activities (ERAs) under the *Environmental Protection Act* involved in the construction will include:

- ERA 16.1(b) – extracting other than by dredging a total of 5000 tonnes or more of material in a year from an area, associated with the shaping of land and material being removed from site.
- ERA 16.1(c) – for screening 5000 tonnes or more of material in a year for the purposes of establishing construction materials for the manufacturing of concrete.
- ERA 8 – storage of chemicals for construction, if thresholds for storage are exceeded as prescribed under the *Environmental Protection Regulations* March 2013.

Any storage of chemicals or hazardous materials will come within the auspices of the relevant ERA and approvals to conform with safe storage and handling will be sought in conjunction with material change of use (code assessable) for a development permit to permit the implementation of the development and/or operational works permits or as standalone ERA application during the construction of the facility.

4.2.11 Quarry Operations

Hard rock aggregates for the use in concrete, road pavements, and asphalts will be sourced from existing commercial operations in Cairns. The most likely source will be the existing Boral Quarry at Redlynch Intake Road.

Material supply and the rate of material supply will be subject to commercial arrangements with existing quarry operators. No additional quarries over and above existing ones are required to service the development.

4.3 DEMANDS IMPOSED ON INFRASTRUCTURE NETWORKS

The construction and operation of Aquis Resort will create demands on the following infrastructure networks:

- transport
- water supply
- waste water
- electricity and communications
- solid waste.

Further detail in relation to the demands, network impacts, associated mitigation measures and management and augmentation strategies is provided in **Chapter 24** (Transport) and **Chapter 25** (Infrastructure).

4.3.1 Transport

Aquis Resort will create vehicle trip demands arising from the movement of workers and materials on and off the site during construction. Stages 1 and 2 will be constructed over 2 x four year periods with peak traffic movements occurring in the third year of each stage. For both stages, construction traffic movements are estimated at 550 additional trips on Yorkeys Knob Road coincident with the 'traditional' peak (8 am to 9 am). Peak movements on and off the site will be scheduled to be non-coincident with the traditional commuter peak, achieved by staging three staggered work shifts commencing from 6am and finishing shifts from 4pm in the afternoon. The resultant non-coincident peaks are 920 and 840 vehicles per hour (vph) between 3 pm and 4 pm for Stages 1 and 2 respectively. The transport of workers on and off site represents 92% of the total construction traffic movements. This demand can be mitigated by the implementation of a dedicated high occupancy vehicle (HOV) fleet.

The operational phase of Stages 1 and 2 will generate traffic movements associated with the transfer of:

- guests to and from Cairns Airport
- guests on day tours visiting local attractions
- visitations by tourists residing in other accommodation houses
- local Cairns residents
- staff travelling to and from work
- back-of-house deliveries associated with the operation of Aquis Resort.

Staff movements by private vehicle equate to 83% of total operational movements, whereas guest and associated back-of-house trips represent 17%. The majority of guests will be transported by coach or similar HOVs and, as a result, the trip frequency by HOV is relatively small with 80 movements per day during Stage 1 operations, and 155 movements per day in the ultimate development.

Peak traffic movements arising from the operation of Stage 1 are estimated to be 1560 vph between 9 pm and 10 pm, which coincides with an anticipated staff shift change. In the traditional morning (8 am to 9 am) and evening (5 pm to 6 pm) peaks, Stage 1 creates additional 600 and 130 movements respectively.

The ultimate (Stages 1 and 2) configuration of Aquis Resort, has estimated peak movements of 2850 vph occurring between 9 pm and 10 pm during staff shift change. Coincident traditional commuter peaks are 1050 vph in the morning peak and 260 vph in the evening peak.

The impact of the operational traffic peaks can be mitigated by introducing a HOV system that would service the transfer of the workforce on a hail-and-ride system, operating between Gordonvale and Palm Cove, and a staff reward programme to encourage car-pooling, higher private vehicle occupancy and active transport. Aquis Resort will be providing purpose built end-trip facilities for staff to secure bicycles, and to shower and change as a means of encouraging active transport.

4.3.2 Water Supply

Construction of Aquis Resort will result in a significant demand on water as a resource, particularly through the demands arising from processes such as earthworks construction and concrete production. Minimising demands on the potable water supply through targeted utilisation of non-potable water sources has been a focus in establishing water demands for the construction of project. See **Section 25.4.2**.

TABLE 4-4 CONSTRUCTION WATER DEMAND

Source	Stage 1 Volume (ML/day)	Stage 2 Volume (ML/day)
Peak Potable	1.7	0.28
Peak Reuse	3.6	0.96

The peak demands have been derived based on a construction programme where the bulk of the site excavation and earthworks occur in Years 1 and 2, and building works in Years 3 and 4. The earthworks construction and concrete production rely on water demand being primarily met with high quality reuse water sourced from the Marlin Coast WWTP.

Stage 1 provides for the construction of the majority of the civil works for the development, hence the reuse water demand associated with earthworks construction is significantly higher for this stage. It is also anticipated reuse water would not come on line until six months into the Stage 1, as there will be a need for the provision of dedicated reuse water mains from the water treatment plants to the site. Hence the potable demand has been estimated to be at 1.7 ML/day, peaking in the first six months of construction, and thereafter reducing back to 0.06 ML/day of potable demand after reuse water comes on line. During this period the contractor will need to make provision to mitigate impacts on the local water network by on-site storage and off-peak draw-down on supply.

Estimated water supply demands for Stage 1 and the ultimate operational phase of Aquis Resort are summarised below and are expressed in the context of industry standard design criteria. These figures are based on a first principles assessment of water demand, utilising water saving devices, best practice site management and utilisation of reuse water as a substitute for traditional potable supplies where suitable, e.g. toilet flushing and irrigation. (Details of this assessment are provided in **Chapter 25 – Infrastructure**.)

TABLE 4-5 OPERATIONAL POTABLE WATER DEMAND

Design Criteria	Stage 1 (ML/day)	Ultimate (ML/day)
MDMM	2.38	4.45
Avg Day	2.08	3.88
Peak Day	2.34	4.37
Max Day	2.60	4.85

TABLE 4-6 OPERATIONAL REUSE WATER DEMAND

Design Criteria	Stage 1 (ML/day)	Ultimate (ML/day)
MDMM	3.85	4.02
Avg Day	3.78	3.91
Peak Day	3.84	4.01
Max Day	3.89	4.11

The reuse water demand includes provision for the irrigation of open spaces and the golf course facilities. This equates to approximately 3 ML/day of peak demand.

The mean day maximum month (MDMM) is based on an average 80% occupancy rate, adjusted to cater for the seasonal peak in the tourist high season. The average day (Avg Day) is based on the

average demand over the entire year. The peak day is based on 90% occupancy, and the maximum day is based on 100% occupancy.

By way of net water demands, the water saving strategies—through the implementation of water management processes—and water saving devices will result in a significant saving in water use. Utilising historic water use planning rates for the Cairns region, typical water use for a development of the size and scale of Aquis Resort would have a MDM of approximately 18 ML/day whereas the combined water use for the resort will be 8.5 ML/day when Stage 2 of the development commences operation.

The benefits achieved through water demand savings are further amplified by the substitution of reuse water for traditional potable water uses. For a MDM of 8.5 ML/day it is anticipated that 4 ML/day of that demand will be met by reuse water sources. The Marlin Coast WWTP is capable of the production of class A reuse water and currently turnover 6 ML of waste water per day. The majority of this reuse water produced is not utilised, and Aquis Resort represents a significant market for this resource.

4.3.3 Waste Water

Waste water generation for the staged construction of Aquis Resort is driven by the workforce population. Stage 1 construction workforce will peak at 3750 and Stage 2 at 3500 workers. It is anticipated that this will occur in Year 3 of each stage, coincident with the peak activity associated with the building construction.

Estimation of waste water generation has been derived from first principles, based upon the water supply demands generated by workers, staff and guests.

The peak construction workforce waste water generation is estimated to be 0.15 ML/ day of average dry weather flow (ADWF) for Stage 1 construction, and 0.14 ML/day for Stage 2. The Marlin Coast WWTP currently has surplus capacity of approximately 2 ML/day; therefore the additional demand generated during construction can be accommodated.

For the operational Stage 1 and at ultimate development the waste water generation is summarised in the table below expressed as ADWF and peak wet weather flow (PWWF):

TABLE 4-7 WASTE WATER GENERATION

Stage	ADWF at Seasonal Peak (ML/d)	ADWF per year (ML/d)	PWWF at Seasonal Peak (ML/d)
Stage 1	3.02	2.64	12.07
Ultimate	5.64	4.92	22.57

The ADWF is utilised to establish capacity demands on the waste water treatment plant and the PWWF defines the pipe network sizing to convey waste water flows to the treatment plant. The Marlin Coast WWTP currently has surplus capacity of 2 ML/day and will require upgrade prior to Stage 1 of Aquis Resort commencing operation. A new dedicated rising main will be required to convey waste water 1300 m to the treatment plant.

4.3.4 Power and Telecommunications

Power requirements for the site works will be defined by the specific contractor needs and construction processes adopted. Primary power demands will be driven by the provision of construction site workers' crib and office accommodation requirements, as well as power demands related to the operation of electrical machinery and tools. This power demand is anticipated to peak during the building construction works in Years 3 and 4 of the construction program. The existing

Ergon network would need to be supplemented by local generators during construction of Stage 1. It is expected Stage 2 construction power demands can be met by the infrastructure provided to service Stage 1 operations.

Stage 1 of the Aquis Resort development is estimated to represent a diversified electrical demand of 15 MVA which exceeds the capacity currently available in the Yorkeys Knob / Smithfield area and will therefore trigger the advancement of major planned infrastructure upgrades to the Ergon Network. The ultimate development will require an additional 12 MVA, taking the total estimated demand of the development to 27 MVA. This demand has been reduced by strategies to reduce or manage peak demand, including thermal energy storage, gas water heating and cooking, and incorporation of photovoltaic power. Further energy reduction options will be considered in detailed design.

Telecommunication requirements for the construction of the site will rely upon the provision of data, land lines, and mobile phone communications. The existing network capacity should be suitable for the construction activities. The major telecommunication carriers have limited network bandwidth and coverage of the development site and general Yorkeys Knob area. Stage 1 will trigger network upgrades to both the fixed and mobile network with only minor augmentation required to support Stage 2.

4.3.5 Solid Waste

Industry best practice for waste management will be implemented during the construction and operational phases of Aquis Resort encompassing waste minimisation, reuse and recycling regimes.

Based on the above principles, Stage 1 construction is anticipated to generate 42 000 tonnes of waste, and Stage 2, 21 000 tonnes, totalling an estimated 63 000 tonnes of construction waste for the entire project. Relative to an estimated total of 1.65 m tonnes of construction materials to be bought to the site, the construction waste equates to 4% of the material inputs which is world's best practice.

The operation of Stage 1 of Aquis Resort is estimated to generate 7700 tonnes of waste annually and the ultimate development will generate 15 300 tonnes annually. Approximately a third of this will be organic waste which can be utilised for composting and reuse as fertiliser, and a further 25% will be paper products which would be typically recycled. Thus the net materials going to landfill will be relatively small. Refer to **Chapter 18 –Waste Management**.

4.4 PUBLIC OPEN SPACE AND USE OF FORESHORE

4.4.1 Public Open Space

In recognition of the limited sports and recreation facilities currently available to the community at Yorkeys Knob, the proposal includes the development of a community sports and recreation facility on land north of Dunne Road and west of Yorkeys Knob Road. The facilities to be provided and the range of uses and sports to be accommodated will be determined through consultation and engagement with the Yorkeys Knob Community during project implementation.

There is no proposal to provide public open space in the Aquis Resort area east of Yorkeys Knob Road. It is usual for conventional residential developments to provide such space as amenity and facilities for residents of the created estates. These developments also include enhancements to existing open space and may provide contributions under an infrastructure charges policy for community facilities.

As the resort complex is a self-contained Integrated Resort, it will cater for the recreational demands and needs of the guest/users of the resort through the provision of on-site sport and recreation facilities such as the golf course, equestrian, walking and cycling tracks, tennis courts, and interpretative centres, as well as other indoor recreation and entertainment facilities. Although access to some of these facilities will be provided to the general public, they will not become public facilities.

It is questionable whether the guests of the resort will place a demand on existing community facilities and will certainly not require scout huts, community halls, or football fields, which are the usual demands from residential development. However it is possible that there may be some demand placed on public spaces such as beaches and foreshores, despite the fact there is proposed to be no direct use of the public foreshore or beaches.

CRC has a trunk infrastructure contributions policy which includes contributions for community purposes. The equivalent demand for community infrastructure for an Integrated Resort such as Aquis is not covered by the equivalency tables in the policy. Service demand is defined under the policy as a 'measure of relative use of an infrastructure item or collection of infrastructure items resulting from the use of land or premises expressed in terms of number of demand units'. There will be an opportunity for the service demand to be established with Council. The service demand for community purposes resulting from Aquis Resort will be relatively low. It is anticipated that the cost of the community sports and recreation facility will be offset against any requirements for contributions for community purposes. The establishment of the service demand and an infrastructure agreement regarding contributions for community purposes is anticipated to be a condition attached to any approval of the development.

4.4.2 Use of Foreshore

Public access to the foreshore in the vicinity of the site is limited to:

- Holloways Beach: foot access to the southern side of the mouth of Richters Creek is available from the south only via the Holloways Beach Township, either along the beach itself or via the footpath within the dunal vegetation.
- Yorkeys Knob Beach: foot access to the northern side of the mouth of Richters Creek is available from the north only via the Yorkeys Knob Township, along the beach itself.

Richters Creek can be crossed on foot from Holloways Beach to Yorkeys Knob Beach during very low tides but this is not a common occurrence.

There is no physical public access to the foreshore abutting the site at Lot 100 NR3818 although there is an unformed esplanade along the eastern boundary of this lot. The land between Lot 100 and Richters Creek is Crown land and forms part of the Great Barrier Reef Coast Marine Park (state). It is also part of the Yorkeys Creek FHA.



A small beach exists on the western bank of Richters Creek and this is accessible from the site via a narrow track. Access to this beach by small boats is possible and there is evidence of regular picnics campfires.

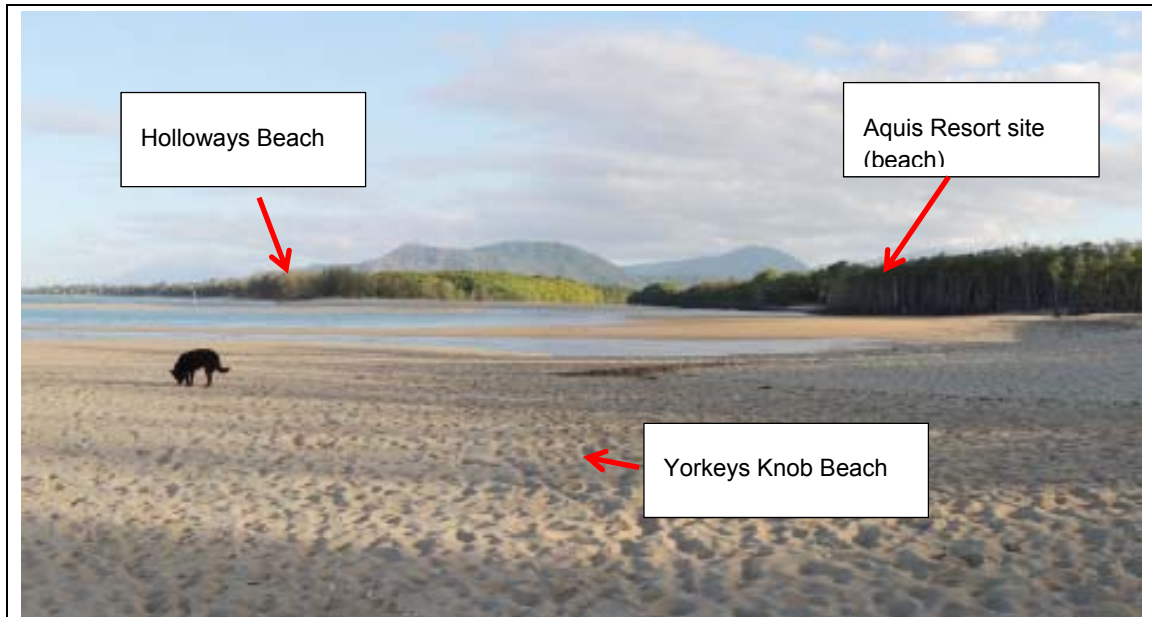


Photo 4-1 View looking south from Yorkeys Knob Beach towards Richters Creek mouth.

The development of the project will not impede public access to the foreshore. There is no plan to install infrastructure to facilitate Aquis Resort guests access the public foreshore.

4.5 RELATIONSHIP TO OTHER PROJECTS

4.5.1 Other Tourism Projects

The scale of Aquis Resort makes it the largest tourism investment in Australia. It represents the first Integrated Resort catering for the Asian tourism market in Australia. It has no relationship with other projects in the region. It is noted there are a number of significant tourism investment proposals more recently announced (Cairns Major Projects Forum 25/10/13) within the region including:

- Satori Resorts - Ella Bay (\$1.4 b) tourism and residential project near Innisfail over 15 years
- Sheraton Mirage refurbishment by the Fullshare Group International (\$200 m) at Port Douglas.

Both of these, and other tourism projects mooted for Cairns, do not compete with Aquis Resort, nor do they target the same market.

4.5.2 Other Major Projects

There are other significant (resource) projects in the region which may occur contemporaneously with the Aquis Resort, including:

- South of Embley – (\$1.45 b) Bauxite mine near Weipa
- Cape Alumina – (\$400 m) Bauxite Mine and Port facilities near Weipa
- Wongai Project – (\$500 m) coking coal project NW of Cooktown.

These projects are unrelated to Aquis Resort. However they will, or may, compete for labour and materials during the Aquis Resort construction period; however, the timing of these projects is uncertain. There are a number of other tourism and residential projects slated for Cairns which may proceed as a consequence of the economic stimulus the Aquis Resort project will generate.

4.5.3 Related Infrastructure Projects

The direct demands on infrastructure networks imposed by the development, together with the likely population growth as a consequence of the economic stimulus, is likely to result in the 'bring forward' of infrastructure projects including:

- new source works for bulk water supply and associated treatment and storage facilities and augmented reticulation networks
- increased capacity at the Marlin Coast waste water treatment plant
- the development of the McGregor Road electrical switchyard and associated electrical reticulation augmentation
- planned upgrades to the state controlled road network including construction of the Captain Cook Highway - Smithfield Bypass and the duplication of the Cairns Western Arterial Road from Freshwater Creek to Caravonica.

4.6 LAND USE APPROVAL

4.6.1 The EIS

The Aquis Resort proposal was declared a Coordinated Project under the SDPWO Act on 1 August 2013. Under this Act, an EIS is required to be prepared, with subsequent approvals required from all levels of government before the land use arrangement for the site is approved.

The EIS is prepared and assessed under the relevant provisions of the SDPWO Act.

Should the Coordinator-General's evaluation report on the EIS not direct refusal and contain conditions to be applied to any approval granted, a Development Application for Preliminary Approval varying the effect of a local planning instrument is to be lodged, in accordance with section 242 of the *Sustainable Planning Act (SPA) 2009*.

The relevant section of the SDPWO Act is section 37(1), items (a) to (c):

- (1) *To the extent the application is for a material change of use, or requires impact assessment, under the Sustainable Planning Act, or both –*
- (a) *The information and referral stage and the notification stage of IDAS do not apply to the application; and*
 - (b) *There are no referral agencies, under the Sustainable Planning Act, for the application; and*
 - (c) *A properly made submission about the EIS is taken to be a properly made submission about the application under IDAS.*

The Development Application will be an Application for a Preliminary Approval varying the effect of a local planning instrument and requires Impact Assessment. Thus, no Information and Referral Stage and no Notification Stage will apply post-application by virtue of the Coordinator-General's consideration under SDPWO Act. Notwithstanding this, the State Agencies (that would ordinarily be Referral Agencies) advising the Coordinator-General in the evaluation of the EIS will have the ability to comment on the subsequent Development Applications required in order to achieve Development Permits to implement the land use (approved by virtue of the Preliminary Approval).

The following is noted:

- Following Approval of the Preliminary Approval, all future Applications are to be assessed in accordance with the provisions of the SPA. Section 37 of SDPWO Act provisions do not apply to these future Applications and, as such, will not affect the process for these Applications under the SPA.
- Neither of the things the Preliminary Approval does (i.e. creation of land use rights for the site and modification of levels of assessment for future Applications) affects the role Referral Agencies will have as either Concurrence Agencies or Advice Agencies for future Applications (i.e. the Preliminary Approval does not limit Agencies' response powers for future Applications).

Having regard to the above, State Agencies informing the Coordinator-General's Evaluation Report (that but for the Preliminary Approval being submitted in accordance with the SDPWO Act, would be Referral Agencies under SPA) are able to advise on matters of the establishment of future land use rights and the proposed levels of assessment.

In considering the key issues to be considered in the Preliminary Approval to vary the effects of a local planning instrument, the matters relevant to State Agencies in the land use decision relate to Strategic Cropping Land (DNRW) and works within the Coastal Management District (DEHP) and impacts on the State Controlled Road Network (DTMR).

Other issues relate to implementation of development of the land use which can be addressed with the subsequent Development Application(s) MCU (Code assessable) for a Resort Complex when the detailed design of the proposal and all operational works issues are identified.

This EIS and the Coordinator-General's Evaluation Report will specifically address the Preliminary Approval application (including referral triggers). The EIS and Coordinator-General's Evaluation report will specify the approvals that it is assessing and list (and where relevant, discuss) the approvals that will need to be assessed subsequent to the evaluation report. The referral triggers associated with the section 242 Preliminary Material Change of Use application are being addressed through the EIS process.

This approach does not remove the requirement for the EIS to address the matters set out in the ToR (critical and routine).

The Co-ordinator General's consideration of this EIS does not remove the requirement for subsequent approvals before the proposal can proceed.

4.6.2 Section 242 Preliminary Approval

Approval to use the land for the proposed development will be a matter for CRC to consider, through the Development Application process established under SPA. The Coordinator-General's Evaluation Report is taken to be a Concurrence Agency response for the purposes of the SPA as it relates to the Preliminary Approval.

The use of a section 242 process is governed in the first instance by the specific provisions of SPA, but also by a Statutory Guideline (Preliminary Approvals that affect a local planning instrument 04/09) that provides context as to how the applications are used and assessed.

The Statutory Guideline states that a Preliminary Approval may affect how a local planning instrument (A Town or Shire or CairnsPlan) is applied or the effect it has on the proposed development. This type of Preliminary Approval may establish specific assessment provisions that will then apply in assessing any future development applications relating to the land.

In addition to approving the proposed development, a section 242 Preliminary Approval may vary the effect of a local planning instrument until the approved development is completed or the time limit for completing the development ends.

The Preliminary Approval may change the level of assessment for the proposed development. For example, the planning scheme may state that a particular aspect of the development is assessable development requiring impact assessment. The Preliminary Approval may instead permit code assessment for that aspect.

The Preliminary Approval may also identify or include a development specific code. The Preliminary Approval may state that particular codes in the planning scheme apply to the proposed development, and reference a new code for assessing the proposed development.

Generally the assessment manager for a Development Application for a Preliminary Approval is the relevant local government. The assessment manager for the 242 Application to permit the subject land to be used for the proposed Aquis Resort will be the CRC.

SPA sets out the matters the CRC must consider when assessing a Development Application, or any part of a Development Application, requiring code or impact assessment.

Before considering the proposed variations to the local planning instrument, the assessment manager must first consider the development that is proposed by the application. The assessment manager must assess the proposed development against a range of criteria which includes assessing the application against the planning scheme (not the variations to the planning scheme proposed in the application) and any relevant State planning instruments.

After the assessment manager has assessed the proposed development, the assessment manager must then assess the proposed variations.

After deciding whether or not to approve the proposed development, the assessment manager must then make a decision about the proposed variations.

The proponent for the Aquis Resort will seek:

- a variation to CairnsPlan 2009 and the FNQ Regional Plan 2009-2031 (FNQRP) to allow development on land outside the Urban Footprint, (partly on Strategic Cropping Land (SCL)) and in the Rural zone through the implementation of a new Local Plan (Aquis Local Plan – ALP)
- a new Local Plan Code applying to the site that introduces appropriate built form, environmental and engineering controls that are the outcomes of this EIS (and agency review) and which are a necessary additional framework (additional to CairnsPlan) against which applications made pursuant to the Aquis Local Plan (ALP) should be assessed.
- varied levels of assessment for the uses proposed, primarily for code assessment, and
- a reliance on the majority of codes that are contained in CairnsPlan 2009.

The proponent proposes the approval of the Aquis Local Plan (ALP) – a copy of the draft ALP is attached in **Appendix D**.

The Draft ALP has the following specific components:

Aquis Precinct Plan (ALP1) showing three precincts:

- Resort Complex
- Sport and Recreation
- Environmental Management and Conservation

Aquis Concept Master Plan (ALP2) which shows the land use distribution on the site. This plan has been developed as part of the EIS process.

Statements for each precinct which collectively show or describe:

- consistent uses and their level of assessment
- general height and bulk limitations
- general layout of component uses
- A Code applying to the site which addresses constraints or impacts which are not otherwise covered by CairnsPlan.

Generally, all substantial development is contained within the resort complex precinct. It contains the principal land use components including hotel suites, casino, theatres, retail, food and beverage, convention/exhibition spaces, lagoon and artificial lake.

The principal land uses in the sports and recreation precinct are an 18-hole golf course and other outdoor and indoor sports and recreation uses.

For all precincts, anything other than minor building work will require future applications to be made to the CRC. These code assessable applications afford another level of review by the CRC and State Agencies.

Any other form of development not contemplated by this application will be subject to impact assessment and public notification and possible third party appeal. The ALP will form part of the common material against which subsequent development applications (code and impact assessable) at Aquis will be assessed (see 316(4) (a) of SPA). In all respects, the ALP, if approved, does not alter the effect of SPA or a SP Regulation.

It is anticipated the ALP will form part of the future Cairns Region Planning Scheme. Section 7 of the current draft Plan may be the most appropriate part for the inclusion of the ALP once approved.

When approved, the ALP will be cross-referenced to other State Government approvals that may be associated with Aquis. In those circumstances, the ALP should be read in conjunction with those approvals.

Pursuant to section 264(1) of the SPA and Schedule 6 Table 1 Item 1 of the *Sustainable Planning Regulation* 2009, the Development Application for Preliminary Approval will be assessed by CRC as Assessment Manager.

Pursuant to section 314 of the SPA, when assessing the Preliminary Approval application CRC will consider:

- the Coordinator-General's Evaluation Report on the EIS
- the merits of the proposed development (including the planning standards outlined in the Aquis Local Plan which will accompany the application)
- the objectives and provisions of the following State and Local Government instruments (and/or their successors/draft successors):
 - The *State Development and Public Works Organisation Act 1971*
 - The *Sustainable Planning Act 2009*
 - The Far North Queensland (FNQ) Regional Plan 2009-2031
 - State Planning Policy December 2013
 - The CairnsPlan 2009.

CRC as Assessment Manager will ultimately decide whether land use approval is granted for the development. In this regard Council:

- must attach the Coordinator-General's conditions to any Preliminary Approval that is granted
- is not limited in its ability to refuse a project notwithstanding that Coordinator-General's evaluation report on the EIS contains conditions to be attached to any approval
- can impose additional conditions on the development approval, provided they are not inconsistent with the conditions stated in the Coordinator-General's evaluation report on the EIS.

Council will issue a Decision Notice outlining its decision to approve and any conditions attached to that approval or in the event of a refusal, the grounds on which the refusal is based.

The proponent's Appeal period commences following receipt of the Development Application Decision Notice, in accordance with the normal Integrated Development Assessment System (IDAS) processes under the provisions of SPA. The proponent's Appeal Period allows the proponent to appeal against any of the Conditions contained in the Development Application Decision Notice or a Refusal should the local government decide to Refuse the Application.

Following the Applicant's appeal period, a Submitter of a 'Properly Made' Submission to the EIS (which is deemed to be a 'Properly Made' submission in response to the Development Application) may exercise submitter appeal rights against the Development Application Decision Notice and any Conditions contained therein.

4.7 FURTHER APPROVALS

A Preliminary Approval will approve the use of the land for the development, but will not authorise assessable development to take place. Accordingly, further applications for development permits will be required as part of the implementation of the project. These will include:

- material changes of use (code assessable)
- operational works
- environmentally relevant activity (ERA) permits.

Approval by the Commonwealth Government under the EPBC Act is also required and assessment is being undertaken under the SDPWO Act as an accredited process.

Outlined below are the approvals required to enable the project to be constructed and operated.

4.7.1 Local Government Approvals

Development Permit for a Material Change of Use

Following receipt of Preliminary Approval, a development permit for material change of use will be required to permit the development to be implemented. This Development Application will be supported by detailed information demonstrating compliance with the ALP Code and all relevant codes of the CairnsPlan.

Pursuant to section 264(1) of the SPA and schedule 6, table 1, item 1 of the Sustainable Planning Regulation 2009, the Development Application will be assessable by CRC as assessment manager.

The table of assessment included in the ALP identifies that, for uses consistent with the ALP, a material change of use application will be code assessable. Pursuant to section 313 of the SPA, in making its decision on the development permit for a code assessable application, CRC will assess the application having regard to:

- provisions of the SPA
- FNQ Regional Plan 2009-2031
- the ALP (including a local plan code for the site informed by the conditions of the Coordinator-General and approved as part of the Preliminary Approval process)
- applicable codes under the CairnsPlan
- State Planning Policy December 2013
- any referral agency responses for the application
- purposes of any instrument containing an applicable code.

The Development Application decision notice for the material change of use will identify subsequent approvals that are required to enable the development to proceed.

Subsequent approvals may include operational works in accordance with the provisions of the CairnsPlan, building works in accordance with the *Building Act 1975* and plumbing and drainage works in accordance with the *Plumbing and Drainage Act 2002*.

4.7.2 State Government Approvals

Future approvals that may be concurrent with the code assessable MCU or with subsequent operational works applications are:

- Native vegetation clearing for road/service crossings. This could include *Nature Conservation Act* approval if protected plants are found (however these may be avoided by design solutions).
- Tidal works for tidal exchange pipes, lake overflow, and emergency supply inlet (if required in the design of the flood conveyance system).
- Marine plant permits for clearing for road/service crossings. This could include *Fisheries Act* approval (however these may be avoided by design solutions).
- Permits under the *Fisheries Act* for any works in fisheries reserves/marine parks and waterway barrier works for crossing of Yorkeys creek.
- ERAs under the *Environmental Protection Act* for land reshaping, chemical storage.
- Operational works for site works and external works for road upgrades/services connections.
- Approvals for construction of works within the state controlled road corridors.

These are all likely to be Referral Agency/State Assessment Manager approvals associated with the implementation of the Preliminary Approval through the code assessable MCU(s) or operational works stages and/or conditions of those approvals.

These future applications will necessarily contain the detailed information required to inform the agencies' specific responses to the development layout and built form of each of the individual development components proposed.

Such approvals may be required under the following state legislation:

- *Aboriginal Cultural Heritage Act 2003*
- *Coastal Management and Protection Act 1995*
- *Environmental Protection Act 1994*

- *Environmental Protection Regulations 2008*
- *Fisheries Act 1994*
- *Land Act 1994*
- *Marine Parks Act 2004*
- *Nature Conservation Act 1992*
- *Strategic Cropping Land Act 2012*
- *Transport Infrastructure Act 1994*
- *Transport Planning and Coordination Act 1994*
- *Vegetation Management Act 1999.*

The table below provides a summary of the relevant legislation as it relates to Aquis Resort.

TABLE 4-8 RELEVANT QUEENSLAND GOVERNMENT LEGISLATION

<i>Aboriginal Cultural Heritage Act 2003</i>	
Agency	Department of Natural Resources and Mines (DNRM)
Purpose of legislation	The purpose of this legislation is to protect Aboriginal and Torres Strait Islander heritage in Queensland.
Relevance to Aquis Resort	Any aspect of development which may impact or have the potential to impact on Aboriginal or Torres Strait Islander heritages. A Cultural Heritage Management Plan is required as part of this EIS to outline the management procedures for protection of Aboriginal and Torres Strait Islander heritage.
Indicative timeframe for seeking approval	In accordance with the terms of the Cultural Heritage Management Plan, during project works.
<i>Coastal Protection and Management Act 1995</i>	
Agency	Department of Environment and Heritage Protection (DEHP)
Purpose of legislation	The main objectives of the CPM Act 1995 is to establish state and regional planning processes for coastal development and to provide for the protection, conservation, rehabilitation and management of the coastal zone through coordinated and integrated planning.
Relevance to Aquis Resort	Any aspect of development that may involve: <ul style="list-style-type: none"> • works within a coastal management district • operational work for prescribed tidal works; • constructing an artificial waterway.

(Continued over)

Indicative timeframe for seeking approval	Works in a coastal management district as part of the EIS process to formulate condition that might apply to a section 242 application/approval. Operational Works for tidal works, artificial water way construction as part of project implementation.
<i>Environmental Protection Act 1994 & Environmental Protection Regulation 2008</i>	
Agency	DEHP
Purpose of legislation	The main objective of the EP Act is to achieve ecologically sustainable development by setting out a program for the identification and protection of important elements of the environment by creating a range of regulatory tools for controlling activities.
Relevance to Aquis Resort	Any aspect of development that may involve: <ul style="list-style-type: none"> • Conducting an environmentally relevant activity (ERA) such as ERA 16(b) – extracting, other than by dredging, a total of 5000 tonne or more of material in a year from an area (man-made lake).
Indicative timeframe for seeking approval	Concurrent with application for development permit to establish the use.
<i>Fisheries Act 1994</i>	
Agency	Department of Agriculture, Fisheries & Forestry (DAFF)
Purpose of legislation	The main objective of this Act is to regulate fishing, development in fish habitat areas and damage to marine plants.
Relevance to Aquis Resort	Any aspect of development that may involve: <ul style="list-style-type: none"> • operational work that is the removal, destruction or damage of a marine plant.
Indicative timeframe for seeking approval	Operational work during project implementation
<i>Land Act 1994</i>	
Agency	DNRM
Purpose of legislation	The purpose of this Act is to administer and manage land for the benefit of the people of Queensland through the creation of different forms of land ownership called 'tenures'.
Relevance to Aquis Resort	Any aspect of development which may involve: <ul style="list-style-type: none"> • road openings or road closures.
Indicative timeframe for seeking approval	Concurrent with application for development permit to establish the use.
<i>Marine Parks Act</i>	
Agency	DNPSR
Purpose of legislation	The purpose of this Act is to provide a framework for the creation and protection of marine parks.
Relevance to Aquis resort	Any aspect of development which may involve works within and/or discharge to the marine park.
Indicative timeframe for seeking approval	Concurrent with application for development permit.
<i>Nature Conservation Act 1992</i>	
Agency	DEHP
Purpose of legislation	The purpose of this Act is to develop a framework for the creation and management of protected areas and the protection of native flora and fauna

Relevance to Aquis Resort	Any aspect of development that may involve: <ul style="list-style-type: none"> Impacts on important terrestrial and aquatic vegetation and other native fauna habitats.
Indicative timeframe for seeking approval	Operational work for project implementation.
<i>Strategic Cropping Land Act 2011</i>	
Agency	DNRM
Purpose of legislation	The purpose of this Act is to protect and preserve land that is highly suitable for cropping and manage the impacts of development on that land.
Relevance to Aquis Resort	Any aspect of development which may involve: <ul style="list-style-type: none"> Development wholly or partly on land identified as strategic cropping land.
Indicative timeframe for seeking approval	As part of the EIS process to formulate condition that might apply to a Section 242 application/approval.
<i>Transport Infrastructure Act 1994</i>	
Agency	DTMR
Purpose of legislation	The purpose of this legislation, in conjunction with the <i>Transport Planning and Coordination Act 1994</i> , is to provide a regime that allows for the planning, construction and operation of state-controlled roads, railways and ports.
Relevance to Aquis Resort	Any aspect of development that impacts on state-controlled transport infrastructure including upgrades to state-controlled transport infrastructure.
Indicative timeframe for seeking approval	As part of the EIS process to formulate condition that might apply to a Section 242 application/approval
<i>Transport Planning and Coordination Act 1994</i>	
Assessment Manager	DTMR
Purpose of legislation	The purpose of this legislation is to improve the economic, trade and regional performance of Queensland.
Relevance to Aquis Resort	Development located within the Cairns International Airport obstacle limitation surface and the structure is at least 12 m high.
Indicative timeframe for seeking approval	At development permit application stage
<i>Vegetation Management Act 1999</i>	
Agency	DEHP
Purpose of legislation	The purpose of this legislation is to regulate the clearing of native remnant vegetation through a mapping system that identifies areas of high conservation value and remnant vegetation.
Relevance to Aquis Resort	Any aspect of development which may involve vegetation clearing.
Indicative timeframe for seeking approval	Operational work during project implementation

4.7.3 Commonwealth Government Approvals

Independent of the state and local government approvals process, the Commonwealth Government may have a role in the approval of the proposal. The following Commonwealth Government legislation applies to the development of Aquis Resort.

TABLE 4-9 RELEVANT COMMONWEALTH GOVERNMENT LEGISLATION

<i>Environment Protection & Biodiversity Conservation Act 1999</i>	
Agency	Department of The Environment
Purpose of legislation	The purpose of the EPBC Act is to provide a framework for the protection and management of matters of national environmental significance.
Relevance to Aquis Resort	Any aspect of the development which may impact on matters of national environmental significance.
Indicative timeframe for seeking approval	Referral made 2 April 2014. Delegate decision that proposal is a controlled action made 8 May 2014. Assessment to be part of accredited process under SDPWO Act.
<i>Native Title Act 1993</i>	
Assessment Manager	Attorney-General's Department
Purpose of legislation	The purpose of this Act is to control activities that may affect the environment and traditional laws of native title of Aboriginal and Torres Strait Islander people.
Relevance to Aquis Resort	Any aspect of development which may impact on native title including: <ul style="list-style-type: none"> • Any works carried out in/Richters Creek
Indicative timeframe for seeking approval	Prior to construction of any works in Richters Creek

a) *Environment Protection & Biodiversity Conservation Act 1999 (EPBC Act)*

Details

A referral to the Federal Department of the Environment for determination of whether the proposal is a 'Controlled Action' under the EPBC Act was made on 2 April 2013. On 5 May 2014 (revised 8 May), the Federal Minister's delegate advised that the proposed action is a controlled action and that assessment would be via the processes under the SDPWO Act as an accredited process.

The Federal Minister's delegate advised that the relevant controlling provisions under the EPBC Act are:

- World Heritage properties (sections 12 & 15A)
- National Heritage places (sections 15B & 15C)
- Listed threatened species and communities (sections 18 & 18A)
- Listed migratory species (sections 20 & 20A)
- Great Barrier Reef Marine Park (sections 24B & 24C)

EPBC Act Compliance Requirements

A detailed assessment of EPBC Act issues is provided in **Chapter 22 – Matters of National Environmental Significance**.

b) Native Title Act 1993 (NTA)

Details

Native title has been extinguished in relation to the freehold grants at the project site. Consequently, no native title compliance is required in relation to any project activities conducted within the boundaries of those freehold parcels of land. Similarly, where native title has been extinguished in offsite areas (e.g. because of a validly declared road, or the valid construction of certain other public works), no native title compliance is necessary for project activities, such as the construction of supporting infrastructure.

Pipeline works are proposed to extend across unallocated state land (USL) and the creek bed of Thomatis Creek in two locations: a lake outlet to the south of the project site, and an inlet to the north-east of the project site. The construction and operation of these pipeline works will constitute a future act under the NTA, to the extent the pipeline works affect native title rights and interests. As these are areas where native title may continue to exist, compliance will be required under the NTA's future acts regime for those parts of the pipeline works that impact on these areas (NT Compliance Area).

Native Title Compliance Requirements

Until the precise permits required to construct and maintain the pipeline works are determined, it is not possible to definitively determine native title compliance requirements for undertaking the pipeline works or for the ongoing 'occupation' of the USL/creek bed by the tidal exchange system. However, it is anticipated a development works permit/authority for tidal works (Tidal Works Authority) granted under the SPA and/or the *Coastal Planning and Management Act 1995* (CPMA) will likely be required to undertake the pipeline works. This would be the appropriate point in the process to address native title compliance.