

## Comment on the draft terms of reference (TOR)—Capricorn Integrated Resort

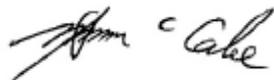
Comments close at **5pm on Monday 27 January 2014**

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Section of draft TOR	Describe the issue	Suggested solution
Pages 1 - 12 CCC comments		
Page 13 - Appendix A <i>EPA Report on Beach Scrubs- Beach Scrubs by Size</i>		

If there is insufficient space in the table above, please attach additional pages.

**Signature:** ...



27 January 2014 (A submission by more than one person must be signed by *each* submitter.)

Send your completed comment form to one of the following:

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CAPRICORN CONSERVATION COUNCIL Inc. – 27 January, 2014

Section	The Issues	Suggested Solutions
<p>1.1 Project Rationale</p> <p>The overall outcome for the Project is to establish a Master Plan that will guide the development of the southern portion of the Iwasaki landholding.</p>	<p>The initial Advice Statement makes frequent reference to the entire landholding of Iwasaki Sangyo (Aust) P/L This suggests that the Master Plan should refer to the overall area rather than just the southern portion of landholdings.</p> <p>As the southern portion of the landholdings have a considerable extent of land with development constraints such as low lying drainage impeded areas and vegetation communities subject to EPBC considerations a range of alternatives will need consideration</p>	<p>The overall Master Plan even in just a preliminary sketch form should be wider than just the southern portion of landholdings.</p> <p>The master Plan could also outline future options for disposal of land in proposed precincts (e.g. residential and commercial lots) and retention of land best maintained as larger tracts (resort precincts, land suited for rural pursuits, managed ecosystems such as wetlands.</p>
<p>Sec 3.2 Elements of the Proposal</p> <p>Outlines plan for Conservation Precinct, Rural Precinct and Urban Precinct</p>	<p>Refers to plans for a Conservation Precinct, Rural Precinct under and Urban Precinct. Discussion on sustainable grazing and preservation and management of natural ecosystems and where necessary rehabilitation needs details of current and potential internal and external risks to these values and strategies to address these within reasonable cost constraints.</p> <p>There is limited recognition of the high environmental values currently within the proposed Urban Precinct and development proposed is excessive</p>	<p>Outline specific management actions using available knowledge of the historic and current condition. Examples could include; management of pasture weeds such as guinea grass and <i>Hymenachne</i> including use of stock, managing natural regrowth in cleared Rural use paddocks vegetation restoration on foredune areas through unauthorised recreation use, water management and allocation- groundwater and surface flow.</p> <p>Outline options for avoiding /minimising loss of these values through better utilising disturbed land within Rural Precinct, disused quarry sites and partnerships with other landholders in the Farnborough area</p>
<p>Sec 3.2 Elements of the Proposal</p> <p>IAS states-The Proposal will also include the implementation of a vegetation rehabilitation strategy to improve the ecological values ...</p>	<p>The commitment to vegetation rehabilitation appears inconsistent with the apparent intention within the Urban Precinct of removing a significant area of intact dunal vegetation including fragmentation of one of the largest (EPBC listed) littoral vine thickets in eastern Australia. (as indicated in Appendix A – Map of Strategic Precincts.</p> <p>Fragments of the littoral vine thicket community have been retained within the existing Mercure Resort area as have elements of other ecological communities such as melaleuca dune swale vegetation. However implementing a “vegetation rehabilitation strategy” is very easy to say in a document but exceedingly difficult and expensive to achieve in practice. Successful “vegetation rehabilitation” takes up</p>	<p>Consider options for retaining and protecting significant tracts of high value dune vegetation rather than fragmented. Intensification of resort/ residential precincts may be preferable to fragmentation.</p>

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	<p>to 30 or 40 years and there are very few examples where it has been achieved in practice by a commercial operator. There is not a history of effective management, let alone improvement of the “ecological values of vegetated areas around the Resort”.</p>	
<p>Pg 8 Reference to the 5 Star Resort features including “with private beach” The map of Strategic Precincts (App A) does not show a “private beach” or indicate whether this would be located on a section of the dunes and intertidal zone of Farnborough Beach or an artificial beach constructed in a wetland feature excavated into the inland dunes,</p>	<p>Providing exclusive access to beachfront is sensitive issues in Queensland and will likely require community concerns to be addressed.</p> <p>Constructed beaches and lake systems can adversely affect ground water systems in terms of water retention, water flow and quality (including possible acid sulphate problems).</p>	<p>More detail should be provided on the nature and location of the “private beach” proposal and consideration of community attitudes evaluating attitude to access loss (and any potential environmental management benefit of exclusivity)</p> <p>If the private beach or other resort associated features involve extensive excavation and reconfiguration details should be provided.</p>

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<p>Pg 9 Section 3.3.1 Strategic Precinct Conservation The values of this proposed precinct are briefly identified as is the need to conduct management</p>	<p>No details are provided on the on the internal and external management influences on the Conservation Precinct or on the assistance provided through cooperative arrangements with other entities such as Fitzroy Basin Association (FBA-Coastal and Marine), Fitzroy River &amp; Coastal Catchments (FRCC), National Parks (QPWS) who provided an interim fire management plan to Rydges Resort. Priority issues requiring attention include, fire management, water flow management especially at boundary with Corio Bay RAMSAR area, effective stock management and control of damaging illegal entry.</p> <p>Management strategies and potential support for the Conservation Precinct should be a detailed consideration.</p> <p>External support could be an adaptation of the current informal arrangements with Queensland Parks and organizations such as (FRCC) or local community groups, (e.g., Surfriders, Bushcare, Landcare, Livingstone Remnant Vegetation Study Group).</p> <p>Excessive track construction and the poor alignment in respect to surveyed public road and actual roads also needs addressing as these factors may be a significant contributor to unapproved and inappropriate access within this proposed Precinct</p>	<p>These management influences and others should be briefly assessed as a basis for a future detailed management plan.</p> <p>An appropriate secondary tenure or zoning should be considered for the Conservation Precinct (e.g. Nature Refuge).</p> <p>It may be appropriate for the Conservation Precinct to be submitted for consideration as part of the Corio Bay RAMSAR area. The benefits and constraints which such an inclusion, may raise for Iwasaki Sangyo (Aust) PL should be evaluated.</p> <p>Engage Livingstone Shire and State Agencies in planning of gazetted roads (especially Kellys Landing Road, road to Sandy Point section of Byfield NP, Big Dune Surf Reserve etc. (as required by any provisions of Qld International Tourist Centre Agreement Act Repeal Act 1989 or any logical adjustment which can assist in ensuring Iwasaki Sangyo P/L have secure management capacity for their land.</p>
<p>Pg 10 Strategic Precinct Rural Existing Iwasaki Sangyo P/L grazing lands to be linked with tourist resort activities. Airstrip to be included in rural precinct</p>	<p>Presentation of an active rural grazing enterprise as a tourist feature is worthwhile and retention of rural landscapes in coastal areas assists in retaining the identity of distinct community localities and broader landscape character.</p> <p>Airstrips, however may experience unanticipated growth and this should be planned for.</p>	<p>The airstrip is likely to require special use definition.</p> <p>See also comments for Sect 3.5.6</p>
<p>Pg 10 Sect 3.3.3 Strategic Precinct Urban “Integration of urban</p>	<p>This statement is meaningless and given that this Precinct (Urban), as laid out in the map of Strategic Precincts (Appendix A) is, at a scale of proposed development, almost totally unsuited to the location.</p>	<p>Proponent should prepare a more appropriate range of design options which demonstration more integration with the existing community. The designs should minimise proposed urban incursions into flood</p>

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<p>land uses, all of which will support the primary tourism of the site”</p>	<p>A. The plan fails to beneficially match with existing Farnborough community spaces and features. Planning workshops on the Capricorn Coast have highlighted a strong community interest in clustered (Village) precincts, separated by retained natural areas with linkages (walk cycle, public transport etc.) Village Clusters. The preliminary expansion plans, developed by RPS, appear as totally separated from the Farnborough community rather than a potential integration adding to growth and diversity. The separated planning may be intentional but downscaling and redesign of the Iwasaki Expansion with a more east- west focus linkage would represent a more appropriate integration within the community. As noted in the report disturbed land areas in this locality can be developed.</p> <p>B. The plan also, raises serious concerns regarding possible residential development in high hazard constraint areas and</p> <p>C - appears to ignore or downplay the extent of proposed destruction of high environmental value (including EPBC listed) features of the Precinct. See sections below for further discussion on concerns B and C.</p>	<p>retention and storm surge areas. Where incursion is considered likely the proposed mode of earthworks and water management should be explained in detail.</p>
<p>Pg 15 Sect 3.5.5 The proposed project intends to provide approximately 8000 residential dwellings</p>	<p>There is little justification to substantiate the need for 8000 additional residential dwellings on the Capricorn Coast especially given that residential development approvals already exist on the coast sufficient to cover growth for at least the next 20 years. There are also poor land sales and recent declines land values in sites which are low lying and subject to potential overland flow (which fits the description of a significant part of the proposed Urban Precinct</p>	<p>Reduce the extent of the propose residential dwelling nodes especially after evaluation of the currently available land on the Capricorn Coast which can already meet demand for several decades at current growth rate. Consistent community input and to town and communities plans (Be Heard workshops) show strong consensus to avoid further urban sprawl into sensitive environments, scenic sites along the coast. Rather, the desire is to minimise the residential and industrial footprint around existing employment, transport and infrastructure hubs. This proposal along with several other (planned or stalled) projects on the coast (all within the Coastal Zone of the Great Barrier Reef World Heritage Area) needs to be assessed in the light of the accumulative impacts on ecosystems, water quality, increased local and commuter vehicular traffic, (high fuel/energy costs, wildlife deaths, loss of natural corridors, contamination storm water runoff...)</p>

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<p>Pg 16 3.5.6 Air Strip and Aviation Facilities</p> <p>Airstrip</p> <p>At present two (2) potential airstrip locations have been identified for investigation as part of the EIS phase of the Project. The preferred location is located in north-east corner of the development as this is the location of an existing cleared area allocated to the provision of an all-weather airstrip.</p>	<p>The proposed airstrip may be too close to wetland areas where enhanced risk bird strike may occur due flock of flying waterbirds. This may also be a possibility with alternative site</p> <p>As there are few other sites suited to development of a light aircraft landing field and services on the Capricorn Coast evaluation, with local authority input, should consider more general light aircraft use.</p>	<p>Evaluate potential hazard from bird strike as well as potential need for destructive management action on birdlife.</p> <p>Evaluate options for broader community services from airstrip and best location from which such a broader service could be provided.</p>
<p>PG 29/30</p> <p>Referable wetlands</p>	<p>Tree covered (e.g. <i>Melaleuca</i> spp.) wetlands generally under-mapped. This is particularly so in narrow dune swale wetland such as occur behind the southern sections of Farnborough Beach (e.g. extensive length but narrow width has made mapping difficult without ground truthing difficult and the latter detailed work has not occurred with wetland mapping outside of south east Queensland)</p>	<p>Prepare more detailed maps</p> <p>And more thoroughly assess the negative implications of intensive housing in dune swale habitats including</p> <ul style="list-style-type: none"> <li>• Prolonged flood retention</li> <li>• Incursion into acid sulphate conditions below dune strata.</li> <li>• Increased runoff peaks increased around Barwell Ck mouth.</li> <li>• Pest management</li> <li>• Future costs to local authority</li> </ul>
<p>34 7.1.1 Clearing of Vegetation</p> <p>IAS reference to clearing initially of low value vegetation to avoid fragmentation</p>	<p>This is contradicted by the extensive development nodes depicted in Concept sketch 3PA</p> <p>See also notes on proposal elements However any plans concentrated on disturbance areas, including hills within Iwasaki Sangyo landholdings, where quarrying, has and will further occur, is generally supported as preferred option.</p>	<p>Consider intensive rather than extensive development of resort precincts to minimise loss of higher value vegetation.</p> <p>Consider establishment of residential areas where quarrying has occurred. This may affect visual amenity from GBR waters and other residents but is preferable to converting swamps to low lying, potentially hazardous residential zones.</p> <p>Consider engagement with adjacent landholders for implementation of plans rather than pursue widespread quality vegetation removal.</p>

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<p>36/37 And Table 5 pg 38 7.2 2.1Vegetation Management 1.Construction work initially focussed around existing resort complex</p>	<p>Concentration of disturbance around the pivot point separating surface and subsurface water flows to the north (Corio Bay drainage) and south (Barwell Creek Drainage) should be evaluated as the means of causing the least impact on the complex low lying drainage systems which carry the highest value vegetation communities and which occur in the currently least disturbed areas. The IAS notes that ground truthing has not occurred. Given that the Coastal Vine Thickets behind Farnborough Beach (Sandy Point to Barwell Creek) represent the largest example of this vegetation type within Central Queensland (and possibly the largest outside of the Wet Tropics and is within the top 1% by size of this community in Eastern Australia vegetation a detailed field assessment is needed of this community. The field study should include assessment of the proportion of vine thicket elements within the mapped area of RE 8.2.6 within the Urban Precinct</p>	<p>Develop a plan for optimised retention and management of areas mapped as Regional Ecosystem 8.2.2 and relevant to the EPBC listing “Littoral Rainforest and Coastal Vine Thickets of Eastern Australia” The Farnborough Beach littoral vine scrubs (261 hectares) are continuous in extent from Sandy Point to Barwell Creek. (See attached extract from EPA report on Central Coast Beach Vine Scrubs)</p> <p>By contrast the aggregated larger area as mapped within Shoalwater Bay Training Area (325 hectares) consists of many small discrete patches spread over 60 km between Sabina Point and the parabolic dune fields between Island Head Creek and Five Rocks Beach.</p> <p>Note that there are minor incursions at Farnborough Beach in the form of the partially disturbed SEVT in front of the existing Mercure Resort and depleted areas associated with the Bangalee subdivision, Hinz Avenue and minor tracks and powerlines</p>
<p>Littoral Rainforest and Beach Vine Ticket of Eastern Australia</p>	<p>2. Despite the above (Point 1) the explanations of vegetation clearing plans and calculation of offset requirements (Table 5) is not consistent with the Concept sketches and maps elsewhere in the document. These indicate that significant clearing and fragmentation is planned (over 60/70%), especially in the EPBC listed Littoral Rainforest and Coastal Vine Thicket of Eastern Australia Community.  While the listing and supporting documentation is focussed on the Regional Ecosystem 8.2.2 significant elements of coastal vine thicket flora (and fauna) is also present in the connected (and more inundation prone) Regional Ecosystem 8.2.6.b Fragmentation of this important remnant will bring weed infestation due to small remnant sizes and lengthy edge effect. Also sea wind and air borne salt damage will damage/destroy a further 20 to 30% in any areas of clearing</p>	<p>Detailed mapping should include assessment of SEVT elements flora and fauna) within the adjacent remnant vegetation on dunes within the proposed Urban Precinct.</p> <p>Assess likely effects of fragmentation through size reduction, exposure and incursion of weeds adverse to survival of closed fine scrubs (e.g. <i>Ipomea carica</i>, guinea grass, and many more)</p> <p>Refer to assessment reports by Fitzroy Basin Association, et al.</p>

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39 Fauna	Needs more study	Impact of increased human presence, domestic animals on native birds, mammals, reptiles and amphibians, crustaceans etc. needs to consider how any construction works, infrastructure, traffic (including vehicles on beaches) will contribute to no net loss of biodiversity. The imperative for this requirement relates directly to the draft assessment in the Great Barrier Reef Strategic Assessment that coastal development is having an increasingly critical negative influence on water quality.
<p>Pg 42 <i>Rockhampton Region Towards 2050 Strategic Framework</i> document The Strategic Framework document proposes creation of another town creation within CQ</p> <p>IAS suggests that the proposed Iwasaki Sangyo PL expansion plans could provide this “town”</p>	<p>There is only limited justification of (based on current regional population growth and changed means by which resource workers access work sites) for the additional town proposal.</p> <p>The expansion plan is more likely to result in an additional populated node to the Capricorn Coast community.</p> <p>With more appropriate and sustainable access to growing job opportunities the argument could be more applicable to the towns of Gracemere and Mount Morgan.</p>	<p>Delete speculatively discussion from the proposed EIS</p> <p>Alternatively to the ‘additional town proposal’ provide justifications and constraints in regard to this site.</p>
<p>Pg 54 7.2.4 Sustainability Frameworks and Impacts Notes considerable impacts requiring carefully managed design and development etc</p> <p>7.2.4.1 Water Wetland requirements Refers to water reclamation, grey water use and proposed</p>	<p>Unfortunately the Map of Strategic Precincts does not appear to offer many opportunities to undertake the careful and through design planning suggested</p> <p>Water management planning should take account of extended period of water retention in low lying areas of site such as occurred during limited periods of (intense) high rainfall during the Summer and Autumn of 2013.</p> <p>Also periods of depleted water systems which occur on a cyclical (6-10 year )basis (e.g. 2004/2005)</p>	<p>Better mapping of constraints overlays and more detailed discussion of optional designs and high impact locations are needed</p> <p>Ensure that development works do not excessively void water uptake away from ground water systems especially where groundwater dependent vegetation exists.</p> <p>Consider effect of water flow/loss of water transmission to freshwater/tidal interface zones especially contribution to fish nurseries and water quality.</p>

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hydrological modelling		More assessment to ensure environmental water supports the whole area's ecosystem requirements, including the drought refugia potential for aquatic birds and other water dependant plants and animals.
56/57 Sec 7.2.4.4 Greenhouse and Climate Change adaptation	<p>Potential loss of remnant native vegetation and contribution to Greenhouse Effect especially with wetland vegetation (melaleucas, sedges, anaerobic peat layers)</p> <p>Farnborough Beach, with minimised human disturbance, may be, in southern section, a long term accreting beach (See BPA Capricorn Coast Beaches report (1975?).</p> <p>Freshwater runoff flooding and long period retention is potentially a greater risk than storm surge (with the exception of areas around North and South branches of Barwell Creek)</p>	<p>Describe methods of avoiding, minimising losses of carbon accreting wetland systems (e.g. dune swales</p> <p>Detailed profiling and catchment mapping of proposed Urban Precinct needed especially for areas below 7 metres AHD and all areas with less than 5% slope. Urban effect of shorter runoff periods but raised flood peaks needs consideration.</p>
Pg 63 Section 8 Reference to Priority Living Area Mapping	The Priority Living Area Mapping (Central Queensland Regional Plan) should not be used as a basis for justifying urban expansion in any locality without conditional examination) The maps have been coarsely drawn around or near urban precincts without excision of even major constraint areas which are quite evident even without requiring further investigation.	<p>Ignore Priority Living Area Mapping.</p> <p>Adapt to avoid areas under 5m AHD or greater where areas are subject flooding and or drainage impedance</p>
65 Constraints Map Livingstone Shire Constraints maps attached in Appendices	<p>The IAS has generally been difficult to access and read (because of continuity of body and attachments) with understanding by community members who have attempted this.</p> <p>Future IAS / EIS material should either produce site specific maps as in Figure 8 but at a larger scale with detailed contours etc.</p> <p>Attachments such as Whole of Shire Maps, or present material on the Departmental or proponent websites where individual reports/ maps etc. can be noted in a table of contents and individually downloaded and viewed if required.</p>	<p>As noted elsewhere- produce in EIS site specific Constraints Mapping and more factual discussion on habitat, water management etc.</p> <p>We understand that this is not necessarily the fault of RPS and are hopefully that this form of time and resource delaying "red tape" will be made more easily accessible and readable to the community in future</p>
p.64 -66 9.1 Site Design Principles & Constraints The south section of the project sites described as area of existing fragmentation compared to land to the north (e.g.	<p>While this statement is correct the zone south of Hinz Avenue has a considerable extent of significant of high environment value habitat including the most stable tract of EPBC listed Littoral Rainforest and Coastal Vine Thicket of Eastern Australia.</p> <p>The remainder of the habitat behind Farnborough Beach does occur to the north of the Mercure Resort but in a less stable environment of parabolic dunes subject to natural fragmentation proposed</p>	Clearer evaluation of the value of remnant vegetation habitat within proposed Urban Precinct needed and, if necessary, depending on modification of plans, comparison of values at the national level.



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		<p>noted.</p> <p>b. Define stormwater retention capacity/services provided by the Barwell Creek groundwater and dune swale wetlands</p> <p>c. Possible impacts on ecological values and creek mouth stability when planned urban drainage system decreases water retention and raises flood runoff peaks in Barwell Creek catchment .</p> <p>d. Assess impact on GBR wetland and Coastal Management District</p>
Appendix D Environmental Opportunities and Constraints Report Pg 27 28		Insufficient time to make detailed comments – needs consultation and expert input.
Map 02A 02B Drainage Constraints Maps	Serves no purpose as the detail relevant to the project area is either obscured, especially around the critical drainage impeded area of dune field and wetland of Barwell Creek drainage; or area too small and too broad a scale.	Delete Maps and prepare detailed site mapping.
Constraints Maps 05A 05B LSC Maps	These maps serve no purpose as the detail relevant to the project area is either obscured, especially around the critical drainage impeded area of dune field and wetland of Barwell Creek drainage; or area too small and too broad	Delete maps Provide detailed mapping preferably using LIDAR survey (which should be at a minimum 20 cm contour within low lying development sites.
Table 1 Edited Wildlife on Line Fauna List Search Results  p.16 <i>Rheodytes leukops</i>	<p>Details reflect the lack of ground truthing and consultation with local expertise and CQU Centre for Environmental Management. Some individuals and groups, e.g. Birdlife Australia, regularly access Iwasaki Sangyo PL landholdings (with permission)</p> <p>Note that this is a freshwater species and never nests of beaches. Also confined to Fitzroy River and tributaries</p>	<p>Seek further assistance from local expertise.</p> <p>With respect to intended high impact areas conduct further studies of habitat and species.</p> <p>Note: <i>Turnix melanogaster</i> recorded on several occasions along track between resort tennis courts( see Essential habitat mapping) and the Homestead in both SEVT and <i>Melaleuca/acacia</i> mix (RE 8.2.6b) woodland with abundant leaf litter. Also recorded in Acacia thicket on hill near the Resort lookout (uphill from Fiveways Junction). These are the only recently reported (30 years plus) recordings of this species from the CQC Bioregion. The species is locally mobile and does not always leave platelets during feeding.</p>
Appendix J Referable Wetlands	Noted that the Queensland Government Mapping of Referable Wetlands for the Environmental Protection Act p.246 lists the	Detailed vegetation mapping of this zone, as defined, should as; It is likely that more complex vegetation types occur with this area at

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	Barwell Creek system as General Environmental Significance (GES) As this is an intended high development area and has other constraints detailed examination is needed See also Livingstone Shire Constraints Map 08B	smaller scales of mapping and, Clear delineation of vegetation types and wetland/stream character would assist in avoidance of excessive impacts on this wetland zone.
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***Appendix A:attached (p.13)***

**4. Characteristics of the Remnant Beach Scrubs of Central Queensland.**

**4.1 Largest patches of remnant beach scrub.**

The five largest areas of remnant beach scrub within the project area include:

Central Queensland Coast (CQC) Bioregion		Brigalow Belt North (BBN) Bioregion	
SWBMTA (Shoalwater Bay Military Training area)	325ha	Cape Upstart	133ha
Farnborough Beach	261ha	Hollins Beach	106ha
White Cliffs	113ha	Plantation Creek	84ha
Belgamba	86ha	Curlew Bay	50ha
3 mile beach	64ha	Wunjunga south	42ha



Map 2. Location of the five largest beach scrub remnants.