

7 September 2021

Chief Executive Officer
Douglas Shire Council

Via email: enquiries@douglas.qld.gov.au

RE: Development Application MCUI 2021_4156 L78 Captain Cook Hwy Mowbray - Material Change of Use (Helipad & Pilot Accom)

To Whom It May Concern

I am writing on behalf of the Cairns and Far North Environment Centre (CAFNEC). We do not support, and make the following comments about, the application **MCUI 2021_4156**.

BACKGROUND

Helibiz Pty Ltd wish to construct a helipad, a helicopter hanger with pilot accommodation. The purpose of this development is to provide a base for helicopters to land, refuel and provide accommodation for the pilots. The helicopters are proposed to be used for airlifting materials for the construction of the proposed Wangetti trail. The construction materials will not be stored on the property; however, will be airlifted from other designated storage points as part of the proposed Wangetti trail project.

There will be no night time flying and flight paths in/out from the helipad will originate/depart from the eastern (coastal) side rather than directly over the Captain Cook Highway.

SOCIAL CONSIDERATIONS

There is clear evidence that local residents and businesses do not support the development. Concerns have been raised about noise, environmental issues and the lack of regulation or control on the activity.

Douglas Shire Council has sought additional information about the intended use of the development. "Concerns are raised with the future use of the site once the Wangetti Trail construction has been completed. The details of the application and the plans don't necessarily align with the purpose of the Wangetti trail construction timeline as the extent of infrastructure being proposed is significant compared to what would ordinarily be associated with a construction project". CAFNEC shares these concerns.

In its response, the applicant advises: "The Wangetti trail will always need helicopter support for ongoing maintenance as long as it exists for public use. Helicopters will provide the necessary lifting service needed to access the rugged terrain that exists all along the trail. The primary contract will take up to 3 years to build followed by a maintenance contract, likely to be an additional 2 years to begin with. The Wangetti Trail is an "evolving development" by National Parks and State Government. It is not our intention to provide regular public transport services, we are essentially an "Charter/Airwork" operator, and we do not hold an approval to conduct a "Regular Public Transport" service. Our intention is to provide Charter/Airwork services from the site. This does not include tourist operations".

In our view, this is unconvincing. To develop a permanent operation which has regular demand for maximum 3 years cannot be a viable proposal. CAFNEC is of the view permanent change of use cannot be supported/

ENVIRONMENTAL CONCERNS

CAFNEC sees two main environmental concerns with this application.

1. Noise

The applicant advises us that the take-off and landing flight path will “either be direct towards the sea, or parallel the coast to the SE. We will not require to overfly any houses on approach or departure, part of the reason we selected this site due to its remote location...We anticipate a maximum of 10 movements per day...”

According to the Helicopter Association International (HAI), the sound of a helicopter flying at 500 feet is about 87 decibels. At 1,000 feet, the sound drops to 78 decibels. For comparison, a vacuum cleaner is about 75 decibels while a power lawn mower is about 90 decibels. (Neither of those make infrasound). The noise levels are much higher on take-off and landing. Apart from houses and businesses within the vicinity, people using the area nearby for recreation will be exposed to the full impact.

In addition, a helicopter does not go straight up when it takes off. It gains altitude flying forward at an angle. We are not informed of the regulated flight heights, but it is safe to assume there will be a considerable area exposed to the noise of helicopters at a much lower height. See video below.

[Helicopters Landing & Taking Off "Raw Sound" - YouTube](#)

CAFNEC is concerned there is no acoustic impact study, no restrictions on numbers of flights or on time of day for flights.

In accordance with 9.4.3 Environmental performance code, Performance Outcome 2 requires: “Potential noise generated from the development is avoided through design, location and operation”. The Acceptable Outcomes include: “AO1 Development does not involve activities that would cause noise related environmental harm or nuisance”. The applicant has responded: “Complies. The applicant has sought to locate the proposed development within the Rural Zone, partially to avoid impacts of the proposal upon adjoining sensitive receptors”.

CAFNEC is very concerned at the impact on the environmental values of the area caused by noise of helicopters. In our view this is clearly not compliant with the Code. There is no report provided in accordance with an Environmental management plan per Planning Scheme Policy SC6.4.

2. Impact on vegetation and waterways

The applicant has included the relevant SARA Pre-lodgement Advice, which included the following observations:

- a) The proposal site is mapped entirely within a wetland protection area, comprising a wetland of high ecological significance.
- b) Following a preliminary investigation, it appears that the proposed development may have an impact on the following MSES which are present on the site or in the adjacent area: Wildlife habitat
 - Endangered and vulnerable
 - Special least concern animal Regulated vegetation
 - Regulated vegetation (category B – endangered or of concern)
 - Regulated vegetation (category R-GBR)

riverine) • Regulated vegetation (essential habitat) Wetland values • High ecological significance wetlands Conservation areas • Marine park (highly protected area).

- c) A desktop assessment suggests a waterway providing for fish passage may be present within the construction footprint of the helicopter hanger, associated landing pad and residential dwelling.
- d) The helipad and helicopter hanger are proposed to be built within category R area (containing an of concern regional ecosystem). The of concern regional ecosystem within the category R area, which will be impacted by the development, is RE 7.2.3 (sparse) – *Corymbia tessellaris* and/or *Acacia crassicarpa* and/or *C. intermedia* and/or *C. clarksoniana* woodland to closed forest on beach ridges (predominantly Holocene).

The SARA pre-lodgement advice also included advice that:

- “For this application, PO1 to PO9 will require a particularly detailed response”.
- “If you believe the category R area mapped on Lot 78 on SR416 is incorrect and the watercourse/drainage feature is located on a different part of the property, the Department of Resources can assess the claim through a Property Map of Assessable Vegetation (PMAV) assessment. An application for a PMAV is made directly to the Department of Resources.”
- “In this instance, you are advised to ground truth/survey the location of the waterway and identify if the waterway contains the physical and hydrological characteristics of a waterway providing for fish passage”.
- “The proposal is for 1000m³ of fill and are therefore considered to meet the definition of high impact earthworks.”
- “As the subject site is mapped as being in a State marine park, a permit to undertake the activity may be needed from DES State-wide Marine Works”.

There is evidence the applicant has undertaken some sort of a ground truth/survey, as the application references “A site inspection with a senior environmental scientist from RPS”. CAFNEC is surprised that no report was generated from this site inspection, and further that it has not been included with application documents.

There is no evidence the applicant has explored whether a permit from DES is required, however the application states “The site is not in a Marine Park. Inspection of Qld Globe mapping indicates an obvious shift in the mapped data layer”.

The MSES mapping undertaken in May 2021 shows the lot includes:

- Highly protected Marine Park (Map 1)
- Bordered by High Value Wetland (Map 2)
- Special least concern wildlife habitat is present (Map 3)
- Regulated vegetation Categories B and R (Map 4) including essential habitat values for the endangered southern cassowary. The area of interest provides core values for the presence of the endangered cassowary.

The DES Vegetation mapping report also shows a watercourse and drainage feature (Map 4.2)

The applicant has included responses to The State Development Assessment Provisions, including State Code 9 GBR Wetland Protection Areas

General

In accordance with State Code 9 GBR Wetland Protection Areas, 9.2.1 General, Performance Outcome 2 requires: "PO2 Development provides an adequate buffer surrounding a wetland to: 1. maintain and protect wetland environmental values; and 2. avoid adverse impacts on native vegetation within the wetland and the buffer. Acceptable Outcome AO2.1 includes: "AO2.1 The buffer surrounding a wetland has a minimum width of: 1. 200 metres, where the wetland is located outside a prescribed urban area..."

The applicant has responded with: "The proposed buffer to the wetlands is between 82m to 92m and is currently covered in tall guinea grass which provides an excellent filtering medium for any stormwater runoff to the wetland."

The application does not meet the required wetland buffer of 200m.

Water Quality

In accordance with State Code 9 GBR Wetland Protection Areas, 9.2.1 Water Quality, Performance outcome 4 requires: "PO4 Development avoids adverse impacts to the water quality of the wetland in the wetland protection area and in the wetland buffer and where adverse impacts cannot be reasonably avoided, impacts are mitigated". There is no acceptable outcome prescribed.

The applicant has responded that "Impacts to the wetland have neem (sic) mitigated by location the hangar as far away from the wetland as possible, without then impacting on the highway environment."

In our view this is not adequate mitigation. Water Quality will be impacted by run off which includes aviation fuel. An independent hydrological report would assist.

Vegetation

In accordance with State Code 9 GBR Wetland Protection Areas, 9.2.1 Vegetation, Performance Outcome 7 requires: "PO7 Development outside the wetland and its buffer: 1. avoids impacts on category C areas of vegetation and category R areas of vegetation; or 2. minimises and mitigates impacts on category C areas of vegetation and category R areas of vegetation after demonstrating avoidance is not reasonably possible". There is no prescribed acceptable outcome.

The applicant has responded that: "The Mapped Category R Reef Regrowth Vegetation appears to have been taken from a high-level interpretation that connects the drainage from the highway directly easterly to the wetland. In reality there is no watercourse or gully through the site. Stormwater flows from the middle of the from the Captain Cook Highway northerly along frontage boundary and the (sic) dissipates over the site approximately 100m to the west of the mapped watercourse. Impact on the actual location of the watercourse has been avoided and mitigated by locating the hangar on the highest part of the site (by Lidar Contours and field inspection)."

In our view this does not meet the Performance Outcome. The applicant has not discussed the development impact on the Category R vegetation other than to state that it does not exist. CAFNEC would ask whether the MSES mapping from May 2021 is incorrect and if so, has the applicant taken steps to rectify the record?

Fauna Management

In accordance with State Code 9 GBR Wetland Protection Areas, 9.2.1, Fauna Management. Performance Outcome 8 requires: "PO8 Development: 1. protects wetland fauna from any impacts associated with noise, light or visual disturbance 2. protects the movement of wetland fauna within and through a wetland

protection area 3. does not introduce pest plants, pest animals or exotic species into a wetland and its buffer". No acceptable outcome is prescribed.

The applicant has responded: "As the site Lot 78 SR416 has historically been used for rural purposes the site has been cleared as does not have any vegetation, apart from a small strip of vegetation along the highway frontage that will not be affected by the proposal."

This response does not deal with the impact on the buffer zone to the wetlands of earth works, construction and operations where helicopters will move frequently in this area creating noise and dust pollution.

Matters of State Environmental Significance

In accordance with State Code 9 GBR Wetland Protection Areas, 9.2.1, Matters of State Environmental Significance, Performance Outcome 9 requires: "PO9 Development outside the wetland: 1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and 3. provides an offset if, after demonstrating all reasonable avoidance minimisation and mitigation measures are undertaken, the development results in an acceptable significant residual impact on a matter of state environmental significance." There is no prescribed acceptable outcome.

The applicant has responded: "The only MSES on the site is derived from the mapped category R area, mentioned above in PO7. The Estimated volume of earthworks will be in the order of 1000m³. As the earthworks are more than 100m³ AND within 200m of the wetland then the possibility of High Impact Earthworks needs to be considered. However the definition of High impact earthworks refers to ...operational work that changes the form of land, or involves placing a structure on land, in a way that diverts water to or from a wetland in a wetland protection area. In reality, any diversion of stormwater is Minor diverted in the order of less than 25 metres sideways and contained within the lot. The diverted stormwater re-joins its current overland sheet flow path before travelling over 82m to the wetland. The earthworks are located a minimum of 82m from the wetland. The impact is minimal and will not have any significant change to surface hydrology. There is no endangered or of concern remnant vegetation affected by the work."

In our view the applicant has not addressed the performance outcome. As it is more than 100m³ and within 200m of wetland, the development demands High Impact Earthworks considerations.

Council Codes

In accordance with 6.2.10.3.a rural zone code, Performance Outcome 2 PO2 requires: 'Buildings and structures are setback to maintain the rural character of the area and achieve separation from buildings on adjoining properties'. Acceptable Outcomes include: AO2 Buildings are setback not less than: (a) 40 metres from the property boundary and a State-controlled road". The applicant has responded: "Complies with PO2. The setback is • 20m from the Highway to tanks • 30m from the Highway to Hangar • 59m to side bdy"

CAFNEC cannot see how this complies with PO2. 20 metres is NOT 40 metres. This development is too close to the Cook Highway.

In accordance with 6.2.10.3.a rural zone code, Performance Outcome 4 PO4 requires: "The establishment of uses is consistent with the outcomes sought for the rural zone and protects the zone from the intrusion of inconsistent uses". Acceptable Outcome is that: "Uses identified in Table 6.2.10.3.b are not established in the rural zone". The applicant has responded: "Complies - Air Services is not listed in the table".

CAFNEC notes that uses in Table 6.2.10.3.b include dwelling unit and Non-resident workforce accommodation – both of which are included in this application. The note provides: “Note – This table does not imply that all other uses not listed in the table are automatically consistent uses within the zone. Assessable development must still demonstrate consistency through the assessment process”.

CAFNEC does not agree that a helipad, fuel storage and accommodation is consistent with the outcomes sought for the rural zone.

In accordance with 6.2.10.3.a Rural zone code, Performance Outcome 5 PO5 requires: “Uses and other development include those that: (a) promote rural activities such as agriculture, rural enterprises and small scale industries that serve rural activities; or (b) promote low impact tourist activities based on the appreciation of the rural character, landscape and rural activities; or (c) are compatible with rural activities. No acceptable outcomes are prescribed. The applicant has responded: “The use of a helipad is suited and compatible with the rural area, rather than in another zone such as rural-residential which might attract complaints”.

CAFNEC does not believe this response satisfies the Performance Outcome. It basically says “better there than in town where there’ll be more complaints.”

In accordance with 8.2.2 Bushfire Hazard Overlay Code, Performance Outcome 10 requires: “Development is located and designed to ensure proposed buildings or building envelopes achieve a radiant heat flux level at any point on the building or envelope respectively, of: (a) 10kW/m² where involving a vulnerable use; or (b) 29kW/m² otherwise. The radiant heat flux level is achieved by separation unless this is not practically achievable”. Acceptable Outcome AO10 provides: “Buildings or building envelopes are separated from hazardous vegetation by a distance that: (a) achieves a radiant heat flux level of at any point on the building or envelope respectively, of 10kW/m² for a vulnerable use or 29kW/m² otherwise; and (b) is contained wholly within the development site”.

The applicant responds: Complies. Refer to calculations next page. Required setback distances to achieve 29KW/m² is 19m. Captain Cook Highway setbacks are • tanks are setback 20m • building setback 30m from Setback from Eastern Wetland vegetation • Hardstand 82m

Without doing the calculations, CAFNEC is concerned that fuel tanks are within 1 metre of the required setback. In our opinion, with increasing weather changes due to climate change, this is a high risk bushfire area.

In accordance with 9.4.3 Environmental performance code, Performance Outcome 1 requires: “Lighting incorporated within development does not cause an adverse impact on the amenity of adjacent uses and nearby sensitive land uses”. Acceptable Outcomes include: “AO1.1 Technical parameters, design, installation, operation and maintenance of outdoor lighting comply with the requirements of Australian standard AS4282-1997 Control of the obtrusive effects of outdoor lighting. AO1.2 Development that involves flood lighting is restricted to a type that gives no upward component of light where mounted horizontally”.

The applicant responds: “Complies. The subject site is located within the Rural Zone, therefore there are no sensitive receptors located within close proximity to the site”.

CAFNEC believes that the close proximity of this development to High Value Wetland and vegetation that includes essential habitat values for the endangered southern cassowary and other species, means that lighting is likely to be a significant disturbance to local wildlife.

In accordance with 9.4.3 Environmental performance code, Performance Outcome 3 requires: "PO3 Potential airborne particles and emissions generated from the development are avoided through design, location and operation of the activity". Acceptable Outcomes are: "AO3.1 Development does not involve activities that will result in airborne particles or emissions being generated. AO3.2 The design, layout and operation of the development activity ensures that no airborne particles or emissions cause environmental harm or nuisance". The applicant has responded: "Complies. The Hangar, landing area and hardstand are sealed concrete surfaces to minimize the potential for airborne particles for the helicopters."

CAFNEC does not agree that this PO has been met. CAFNEC is concerned at dust impact from helicopters. 'Rotor downwash' is a commonly ignored phenomenon that occurs during helicopter hover in close proximity to a ground surface. It has the potential to cause significant damage to nearby vehicles and objects, as well as people. It is not clear what impact this activity has on the natural environment, over time.

[Helicopter Rotor Downwash – Excessive wind, FOD and brownouts, what are the risks? - JJ Ryan Consulting](#)

In accordance with 8.2.4 Flood and storm tide hazard overlay code, Performance Outcome 1 requires: "PO1 Development is located and designed to: ensure the safety of all persons; minimise damage to the development and contents of buildings; provide suitable amenity; minimise disruption to residents, recovery time, and rebuilding or restoration costs after inundation events" Acceptable Outcomes include: "AO1.3 New buildings are: (a) not located within the overlay area". The applicant responds: "a) New buildings are located in the Floodplain Assessment Overlay, but above the 100 year ARI - Mossman Port Douglas and Daintree Flood predicted Storm-tide levels (including freeboard) of 3.58m adopted by Council."

CAFNEC submits this Performance Outcome is not met. The buildings are located within the Floodplain Overlay area.

In accordance with 8.2.4 Flood and storm tide hazard overlay code, Performance Outcome 4 requires: "PO4 Development is resilient to flood events by ensuring design and built form account for the potential risks of flooding. Acceptable Outcome AO4.2 provides: "Materials are stored on-site: (a) are those that are readily able to be moved in a flood event; (b) where capable of creating a safety hazard by being shifted by flood waters, are contained in order to minimise movement in times of flood". The applicant responds: "To be incorporated into the design ".

CAFNEC is very concerned about fuel storage tanks at this site. See discussion below re safety.

In accordance with 8.2.7 Natural Areas Overlay Code, Performance Outcome 1 PO1 requires: "Development protects matters of environmental significance". Acceptable Outcomes include: "AO1.1 Development avoids significant impact on the relevant environmental values" or "AO1.2 A report is prepared by an appropriately qualified person demonstrating to the satisfaction of the assessment manager, that the development site, or does not contain any matters of state and local environmental significance" or "AO1.3 Development is located, designed and operated to mitigate significant impacts on environmental values. For example, a report certified by an appropriately qualified person demonstrating to the satisfaction of the assessment

manager, how the proposed development mitigates impacts, including on water quality, hydrology and biological processes”.

The applicant has responded to AO1.1 with: “Complies”. The applicant has responded to AO1.2 and AO1.3 with: “Complies - A site inspection with a senior environmental scientist from RPS has confirmed there are no matters of state and local environmental significance on site. The Natural Areas Overlay Code shows mapped MSES_ Regulation traversing the site. This mapping reflects the Mapped Category R Reef Regrowth Vegetation, which in turn reflects a perceived watercourse through the site. In reality there is no watercourse or gully through the site. Stormwater flows from the middle of the (sic) from the Captain Cook Highway northerly along frontage boundary and the dissipates over the site approximately 100m to the west of the mapped watercourse. The stormwater flow will not be affected by the works.”

CAFNEC is concerned that, while the applicant has engaged a senior environmental scientist from RPS to undertake a site visit, there is apparent reluctance to prepare a report on MSES values or on any impact on water quality etc. – just a claim the MSES mapping is wrong. In our view, if the vegetation of environmental significance is no longer evident, then it should be reinstated or not developed in a way which negatively impacts on ability to regenerate. In our view, an Ecological assessment report is required, as it is not clear what vegetation has been removed and whether further development will compromise any remaining environmental qualities.

In accordance with 8.2.7 Natural Areas Overlay Code, Performance Outcome 3 requires: “PO3 An adequate buffer to areas of state environmental significance is provided and maintained”. Acceptable Outcomes are: “AO3.1 A buffer for an area of state environmental significance (Wetland protection area) has a minimum width of: (a) 100 metres where the area is located outside Urban areas; or (b) 50 metres where the area is located within a Urban areas”. The applicant responds: “Substantially Complies. The site does not contain any mapped wetland. The wetland is located on the adjoining land to the east Lot 118 SR286. Distances to mapped wetland are: ☐☐Toe of earthworks between 82m to 92m ☐☐Edge of hardstand between 91m to 100m”.

In our view 82 m is not 100m – this does not comply. The wetland is recorded as “High Value Wetland” with Special least concern wildlife habitat. Substantial compliance is not sufficient.

In accordance with 8.2.7 Natural Areas Overlay Code, Performance Outcome 4 requires: “PO4 Wetland and wetland buffer areas are maintained, protected and restored.” The Acceptable Outcomes include: “AO4.2 Degraded sections of wetlands and wetland buffer areas are revegetated with endemic native plants in patterns and densities which emulate the relevant regional ecosystem”. The applicant responds:” The wetland buffer area is currently cleared land used for agricultural purposes.”

The Performance Outcome requires revegetation of the buffer area. The applicant clearly does not intend to comply.

In our view, an Ecological assessment report is required, as it is not clear what vegetation has been removed and whether further development will compromise any remaining environmental qualities.

SAFETY CONCERNS

Aside from the obvious safety risk of a helicopter crash in this area, CAFNEC has safety concerns with this application which includes Fuel storage.

CAFNEC is concerned that fuel storage is a considerable escalation of safety risk. The risks of environmental damage, explosion and fire are increased in an area which is very close to the main highway. The applicant has identified fuel storage as: “The proposed tank is to be provided by a National aviation fuel distributor “IOR” based in Cairns and will provide a 10,000 litre Jet A1 tank fully certified to AS. The tank is double-skinned manufactured from stainless steel with an integrated fall in the floor to a low point sump. The tank is fully bunded and self-sufficient, with dimensions of 1.9w x 6.3l w by 1.2high.”

In accordance with 8.2.4 Flood and Storm Tide Hazard Overlay Code, Performance Outcome PO6 requires that: “Development avoids the release of hazardous materials into floodwaters”. Acceptable outcomes include: For Material change of use “AO6.1 Materials manufactured or stored on site are not hazardous or noxious, or comprise materials that may cause a detrimental effect on the environment if discharged in a flood event or AO6.2 If a DFE level is adopted, structures used for the manufacture or storage of hazardous materials are: (a) located above the DFE level; or (b) designed to prevent the intrusion of floodwaters. In response the applicant has said that the development complies with the performance outcome due to the siting, roofing and bunding of the fuel storage tanks”. The applicant has responded: “All works are above the DFE level of 3.58m”.

CAFNEC is concerned that the siting of tanks and amount of fuel stored poses a significant risk. We recommend extreme caution in assessing compliance with this aspect of the application. We contend that spills from an above ground tank are more likely to result in an escape into the environment. Bunding does not guarantee it will be contained. In addition, there is a higher risk of escape with above ground tanks during cyclonic conditions.

CAFNEC is concerned that storm tide flooding may pose risks of escape of fuel into the waterway and surrounding environment and believes that a hydraulic and hydrology report, prepared by a suitably qualified professional should be required.

Lucy Graham

Yours sincerely
Lucy Graham
Director