

ORDINARY MEETING 28 OCTOBER 2015	1
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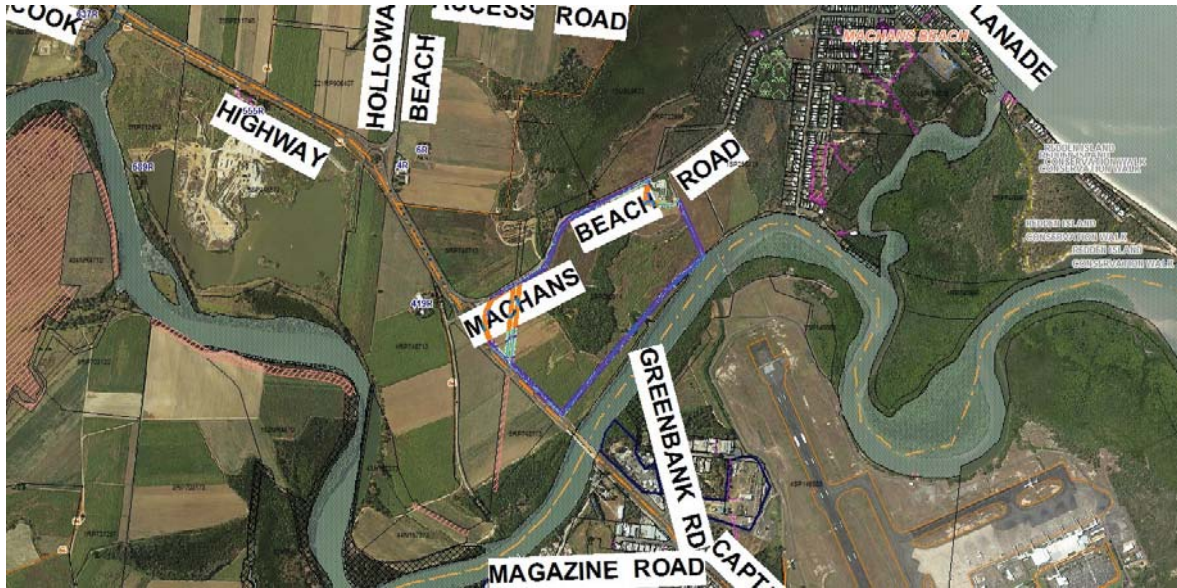
MATERIAL CHANGE OF USE - OUTDOOR SPORT AND ENTERTAINMENT (MOTORISED RECREATIONAL VEHICLE TRACKS) - 3L MACHANS BEACH ROAD, MACHANS BEACH - DIVISION 8

C S Garner | 8/7/3316 ELEC | #4911930

<u>PROPOSAL:</u>	OUTDOOR SPORT AND ENTERTAINMENT (MOTORISED RECREATIONAL VEHICLE TRACKS)
<u>APPLICANT:</u>	J MADDEROM C/- BRAZIER MOTTI PTY LTD PO BOX 1185 CAIRNS QLD 4870
<u>LOCATION OF SITE:</u>	3L MACHANS BEACH ROAD, MACHANS BEACH
<u>PROPERTY:</u>	LOT 3 ON SP 258914
<u>PLANNING DISTRICT:</u>	BARRON SMITHFIELD
<u>PLANNING AREA:</u>	RURAL 1
<u>PLANNING SCHEME:</u>	CAIRNSPLAN 2009
<u>REFERRAL AGENCIES:</u>	DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING (STATE CONTROLLED ROAD 7 COASTAL MANAGEMENT DISTRICT)
<u>STATUTORY ASSESSMENT DEADLINE:</u>	10 NOVEMBER 2015
<u>APPLICATION DATE:</u>	6 JULY 2015
<u>DIVISION:</u>	8
<u>APPENDIX:</u>	<ol style="list-style-type: none"> 1. APPROVED PLAN(S) & DOCUMENT(S) 2. NOTICE OF INTENTION TO COMMENCE USE 3. CONCURRENCE AGENCY CONDITIONS & REQUIREMENTS 4. INFRASTRUCTURE CHARGES

5. MOTORISED RECREATIONAL VEHICLE SPECIFICATIONS
6. NOISE ASSESSMENT REPORT
7. CAIRNS AIRPORT OVERLAYS

LOCALITY PLAN



RECOMMENDATION:

That Council approves the above development application for Outdoor Sport and Entertainment over land described as Lot 3 on SP 258914, located at Machans Beach Road, Machans Beach, subject to the following:

APPROVED DRAWING(S) AND / OR DOCUMENT(S)

The term 'approved drawing(s) and / or document(s)' or other similar expressions means:

Drawing or Document	Reference	Date
Site Plan	Brazier Motti, Job: 33676/1-1, Plan: 33676/001 F	9 September 2015
Office and Spectator Viewing Building Plans	'Office and Spectator Viewing Building' – Layout and Elevation	Undated, submitted to Council 14 September 2015
Amenities Building Plans	'Amenities Building'	Undated, submitted to Council 14 September 2015

Assessment Manager Conditions

1. Carry out the approved development generally in accordance with the approved drawing(s) and/or document(s), and in accordance with:-
 - a. The specifications, facts and circumstances as set out in the application submitted to Council;

- b. The following conditions of approval and the requirements of Council's Planning Scheme and the FNQROC Development Manual.

Except where modified by these conditions of approval

Timing of Effect

2. The conditions of the Development Permit must be effected prior to Commencement of Use, except where specified otherwise in these conditions of approval.

Notice of Intention to Commence Use

3. Prior to commencement of the approved use on the site, written notice must be given to Council that the development fully complies with this Development Permit. Please return the attached "Notice of Intention to Commence Use" form when the use has commenced. (See Appendix 2).

Operational Works

4. Development Approval for Operational Works is required for all earth works, civil works, drainage works, access and landscape works associated with the development.

All such works must be completed to the satisfaction of the Chief Executive Officer prior to Commencement of Use. Where plans are required to be submitted for approval, three (3) A1 size copies and one (1) A3 size copy of all relevant plans must be submitted.

Public Safety Area

5. All elements of the proposed development aside from landscaping must be located outside the Public Safety Area (PSA) for Cairns Airport.

Water Supply Works Internal

6. Undertake the following water supply works internal to the subject land:-
- a. The development must be serviced by a single internal water connection made clear of any buildings or structures; and

All the above works must be designed and constructed in accordance with the FNQROC Development Manual.

On-site Effluent Disposal

7. A site plan indicating the final location of the Land Application Area (LAA) for the amenities building, with the LAA and any mechanical and electrical components above the Q100 flood level is to be submitted to Council at the Plumbing Application Stage.

The LAA is to be located as far as practical away from any aquatic recreation areas; and

The system is not to have inflows exceeding 1800 litres per day.

The method of on-site effluent disposal must be in accordance with the Plumbing and Drainage Act 2002. Details of the wastewater treatment system to be installed must be in accordance with report submitted by ETS Geotechnical, Report No.GT15-2020002R Rev 1, dated September 2015, Council Ref #4873858.

Drainage Study of Site

8. Undertake a local drainage study to determine drainage impacts on upstream and downstream properties and the mitigation measures required to minimise such impacts. In particular, the post-development discharge of stormwater from the subject site must have no-worsening effect on the drainage of upstream or downstream properties. The study must also identify the need and location of any drainage easements to convey stormwater to the lawful point of discharge. The drainage study must be endorsed by the Chief Executive Officer prior to the issue of a Development Permit for Operational Works.

Existing Creek and Drainage Systems

9. All existing creek systems and drainage areas must be left in their current state, including no channel alterations and no removal of vegetation unless consented to in writing by the Chief Executive Officer.

Necessary approvals from the Department of Natural Resources & Mines (DNRM) must be obtained for carrying out works in a watercourse.

Lawful Point of Discharge

10. All stormwater from the property must be directed to a lawful point of discharge such that it does not adversely affect surrounding properties or properties downstream from the development.

Sediment and Erosion Control

11. **Soil and water management measures must be installed/implemented prior to discharge of water from the site, such that no stormwater flow from the site causes environmental harm (in accordance with the requirements of the *Environmental Protection Act 1994, and the FNQROC Development Manual*).**

Or;

A sediment and erosion control plan must be submitted prior the issue of a Development Permit for Operational Works. Such measures must be installed / implemented prior to discharge of water from the site, such that no stormwater flow from the site causes environmental harm (in accordance with the requirements of the *Environmental Protection Act 1994, and the FNQROC Development Manual*).

Flooding

12. **The floor level for all buildings and on-site storage facilities for fuels, chemicals and motorised recreational vehicles shall be provided 1% AEP flood immunity. Council recommends that the finished floor level to be 300mm above the 1% AEP flood level.**

External Works

13. **Undertake the following works external to the land at no cost to Council:**
- a. **Construct a rural allotment access and bitumen turnout in front of the proposed access in accordance with FNQROC Development Manual Standard Drawing S1105E.**

The proposed works must be included in the application for Operational Works. Such works must be constructed in accordance with the endorsed plan to the satisfaction of the Chief Executive Officer prior to Commencement of Use.

Off-Street Car Parking

14. **The amount of staff/customer vehicle parking must be as specified in the submitted application details which is a minimum of thirty (30) spaces. The car parking layout must comply with the Australian Standard AS2890.1 2004 Parking Facilities – off-street car parking.**

A minimum of ten (10) of the parking spaces and associated manoeuvring areas must be imperviously sealed, drained and line marked.

The full length of the driveway between the road frontage and the parking area must be sealed and drained.

Landscaping

15. The Applicant/owner must landscape the subject land and street frontage in accordance with the *FNQROC Development Manual* and in accordance with a landscape plan endorsed by the Chief Executive Officer prior to the issue of a Development Permit for Building Works. In particular, the plan must show:
- a. Dense landscaping to the Machans Beach Road frontage to screen on-site activities from driver view and to assist with noise attenuation to the properties on Machan Street, to the north. Landscaping is to extend from the boundary with Lot 2 on SP258914 to the eastern edge of the riparian area within the site;
 - b. Dense landscaping to the eastern boundary with Lot 1 on RP747652 using species that will provide noise attenuation to the properties on Christensen Street, to the east;
 - c. Planting to the banks of the jet-sprint boat track with a species that will minimise erosion;
 - d. Rehabilitation of the disturbed areas of the site resulting from previous earthworks activities;
 - e. Plantings and/or fencing to be used to delineate pathways and other areas within the site;
 - f. Any additional planting required for dust and noise suppression;
 - g. The use of recommended species for ornamental use as in the Cairns Airport Land Use Plan (Table 8.5B) in order to limit wildlife hazards, as referred to in P04 and A04.2 of the State Planning Policy Code: *Strategic airports and aviation facilities*;
 - h. Species that would not at maturity encroach into the airport's operational airspace; and
 - i. Inclusion of all requirements as detailed in other relevant conditions included in this Development Permit. A copy of this Development Approval must be given to the Applicant's Landscape Architect/Designer.

Two (2) A1 copies and one (1) A3 copy of the landscape plan must be endorsed by the Chief Executive Officer prior to the issue of a Development Permit for Operational Works. Areas to be landscaped must be established prior to Commencement of Use and must be maintained at all times, all to the satisfaction of the Chief Executive Officer.

Pest Plant Management

16. A Pest Plant Management Plan in accordance with AP1.34-Pest Plant Management of the FNQROC Development Manual is to be submitted to Council for endorsement prior to the commencement of Operational Works. This plan should address the presence of all Class 1-3 Pest Plants and any Declared Pest plants under the Cairns Regional Council Subordinate Local Law No. 3 (Community & Environmental management) 2011 Schedule 1-Register for Declared Pest Plant & Animals.

Vegetation Clearing

17. Existing remnant and riparian vegetation on the subject land must be retained in all areas of the site and not damaged as a result of the approved use. Any future vegetation clearing or works would require an Operational Works Approval.

Limitations on Use

18. Development ensures that:
 - a. a maximum of two (2) motorised recreational vehicles (not including electric trikes) operate on the site at any one time;
 - b. the use operates on a booking bases and is not open to drop-in customers.

Hours of Operation

19. The hours of operation of all tracks shall be restricted to between 9am to 5pm, Monday to Sunday. Any extension to the above hours will require application to Council.

Vehicle Servicing and Maintenance

20. All vehicle servicing and maintenance must be carried out off the site.

Fuel Storage

21. All fuels must be stored in an undercover and secure location at all times.

Advertising Signage

22. Signs on the subject land must conform with relevant Local Laws applied under the Cairns Regional Council Control of Advertising (Application of a Continuing Local Law) to the requirements and satisfaction of the Chief Executive Officer.

Stockpiling and Transportation of Fill Material

23. Soil used for filling or spoil from excavation is not to be stockpiled in locations that can be viewed from adjoining premises or a road frontage for any longer than one (1) month from the commencement of works.

Transportation of fill or spoil to and from the site must not occur within:

- a. peak traffic times;
 - b. before 7:00 am or after 6:00 pm Monday to Friday;
 - c. before 7:00 am or after 1:00 pm Saturdays; or
 - d. on Sundays or Public Holidays.
24. Dust emissions or other air pollutants, including odours, must not extend beyond the boundary of the site and cause a nuisance to surrounding properties.

Storage of Machinery and Plant

25. The storage of any machinery, material and vehicles must not cause a nuisance to surrounding properties, to the satisfaction of the Chief Executive Officer.

Demolish Structures

26. All structures not associated with the approved development (including disused services and utilities) must be demolished and/or removed from the subject land prior to Commencement of Use.

Rehabilitation of Site

27. All items and materials that have been dumped on the site including but not limited to: used tyres, mulched vegetation, abandoned vehicles, concrete blocks and rusty machinery parts must be removed from the site prior to Commencement of Use.

Damage to Council Infrastructure

28. In the event that any part of Council's existing sewer / water, drainage or road infrastructure is damaged as a result of construction activities occurring on the site, including but not limited to; mobilisation of heavy construction equipment, stripping and grubbing, the applicant/owner must notify Cairns Regional Council immediately of the affected infrastructure and have it repaired or replaced at the developer's/owners/builders cost, prior to the Commencement of Use.

Refuse Storage

- 29. Refuse storage and service to the site must be in accordance with a waste service agreement arranged through Council's Water & Waste Department.**

Storage of all potential waste and food sources must be covered so that they are not accessible to wildlife, particularly birds and bats.

Acid Sulfate Soils – Jet Sprint Boat Track

- 30. The earthworks to create the proposed jet sprint boat track may result in disturbance of potential acid sulfate soils (PASS).**

Where it is found that PASS exist, treatment of soil must be undertaken on-site to neutralise acid, prior to disposal as fill, in accordance with the 'Queensland Acid Sulfate Soil Technical Manual: Soil Management Guidelines' produced by the Department of Science, Information Technology, Innovation and the Arts, and the State Planning Policy– Appendix 3 SPP code: *Water quality*.

Fencing

- 31. The perimeter of the site must be securely fenced in such a way as to prevent unauthorised use of the facility.**

Electricity and Telecommunications

- 32 The development is to be provided with an underground electricity supply and telecommunication service.**

Dust and other Emissions

- 33. The development must be undertaken in accordance with a Construction and Operation Management Plan prepared by a suitably qualified expert that identifies measures to be complied with to ensure that the construction (e.g. sealing of access and car parking areas) and operation of the proposed use will not emit dust, smoke, dust, ash or steam into the airport's operational airspace.**

Operational Airspace & Lighting Emissions

- 34. The Applicant / owner must provide detailed drawing that shows the maximum height of both proposed buildings in AHD. Certification must be obtained from the Cairns Airport Pty Ltd, Air Services Australia and the Civil Aviation Safety Authority (CASA) to demonstrate that:**

- a. all buildings, structures, poles, posts, or other obstacles do not encroach within the Airport's operational airspace and Obstacle Limitation Surface (OLS) or Procedures for Air Navigation Services – Airport Operational Surfaces (PANS-OPS) as identified on the Operational Aspects of Cairns International Airport Overlay Maps in Council's Planning Scheme; and
- b. all lighting, cladding and building materials are of an acceptable standard so as not to impact on the operational aspects of the Airport with regard to light emissions, reflectivity or other emissions.

The Applicant/owner must independently validate compliance with the above condition at the following times:

- a. Prior to the commencement of works on site; and
- b. Upon completion of construction but prior to the commencement of use.

All costs associated with meeting the requirements of this condition are to be borne by the Applicant/owner.

- 35. The Applicant/owner must also provide confirmation to Council that any encroachments in the Airport's operational airspace as a result of construction activities, including the use of cranes or other equipment, have been approved by Cairns Airport Pty Ltd International, or other responsible entity, prior to issue of a Development Permit for Building Work.

Acoustics – Aircraft noise intrusion – Building siting and construction

- 36. The office/spectator viewing building must be designed to ensure compliance with AS2021–2000 (2015) *Acoustics – Aircraft noise intrusion – Building siting and construction*.

Lighting Hazards

- 37. All external lighting must be designed and constructed by a suitably qualified person to ensure that it does not increase risk of an aircraft incident and has regard to the Civil Aviation Safety Authority's Manual of Standards Part 139 – *Aerodromes*, Chapter 9, Section 9.21 *Lighting in the Vicinity of Aerodromes*.

CONCURRENCE AGENCY CONDITIONS & REQUIREMENTS

Concurrency Agency	Concurrency Agency Reference	Date	Council Electronic Reference
State Assessment Referral Agency	SDA-0715-022580	28 August 2015	#4857566

Refer to Appendix 3: Concurrence Agency Requirements. (Please note that these conditions / requirements may be superseded by subsequent negotiations with the relevant referral agencies).

FURTHER ADVICE

1. This approval, granted under the provisions of the *Sustainable Planning Act 2009*, shall lapse four (4) years from the day the approval takes effect in accordance with the provisions of section 339 and section 341 of the *Sustainable Planning Act 2009*.
2. All building site managers must take all action necessary to ensure building materials and / or machinery on construction sites are secured immediately following the first cyclone watch and that relevant emergency telephone contacts are provided to Council Officers, prior to commencement of works.
3. This Development Permit does not approve the construction of the proposed buildings on site. A Development Permit for Building Works is required to be obtained prior to Building Works being carried out.
4. This approval does not negate the requirement for compliance with all other relevant Local Laws and other statutory requirements.

Infrastructure Charges Notice

5. A charge levied for the supply of trunk infrastructure is payable to Council towards the provision of trunk infrastructure in accordance with the Adopted Infrastructure Charges Notice, a copy of which is attached for reference purposes only. The original Adopted Infrastructure Charges Notice will be provided under cover of a separate letter.

The amount in the Adopted Infrastructure Charges Notice has been calculated according to Council's Adopted Infrastructure Charges Resolution.

Please note that this Decision Notice and the Adopted Infrastructure Charges Notice are stand-alone documents. *The Sustainable Planning Act 2009* confers rights to make representations and appeal in relation to a Decision Notice and an Adopted Infrastructure Charges Notice separately.

The amount in the Adopted Infrastructure Charges Notice is subject to index adjustments and may be different at the time of payment. Please contact the Development Assessment Team at council for review of the charge amount prior to payment.

The time when payment is due is contained in the Adopted Infrastructure Charges Notice.

6. For information relating to the *Sustainable Planning Act 2009* log on to www.statedevelopment.qld.gov.au. To access FNQROC Manual, Local Laws and other applicable Policies log on to www.cairns.qld.gov.au.

LAND USE DEFINITIONS*

In accordance with CairnsPlan the approved land use of Outdoor Sport & Entertainment is defined as:

Means the use of premises for sport, physical exercise, recreation or public entertainment predominantly outdoors.

The use includes facilities commonly described as race track (for cars, motor cycles, horses, dogs, etc), showground, theme park, pony club, commercial sports ground and other facilities based on the appreciation and enjoyment of the natural features of a locality.

*This definition is provided for convenience only. This Development Permit is limited to the specifications, facts and circumstances as set out in the application submitted to Council and is subject to the abovementioned conditions of approval and the requirements of Council's Planning Scheme and the FNQROC Development Manual.

EXECUTIVE SUMMARY:

Council is in receipt of a development application for a Material Change of Use for an Outdoor Sport & Entertainment use, specifically a motorsport facility consisting of three tracks for different motorised recreational vehicles at Machans Beach Road, Machans Beach.

The site has a total area of approximately 46.35 hectares and is within the Rural 1 Planning Area. The site is affected by the following relevant Overlays: Flood Management, Operational Aspects of Cairns International Airport and Vegetation Conservation & Significant Waterways, and is accessed via a Collector Road.

The proposed development will involve operational works and building works. The proposed activities involve the use of three different motorised recreational vehicles: a motorised buggy, electric trike and jet sprint boat. It is considered that these would be compatible with the surrounding rural uses of the land and have a low environmental impact. All vehicle storage, servicing and maintenance would be carried out off site and the use will only operate for booked tours and not for drop-in customers.

Part of the site falls within the Public Safety Area for Cairns Airport. A condition requires that all elements of the proposed use must be located outside of this area. Other conditions have been included in order to protect the interests of the Airport including restrictions on lighting, height and external finishes of buildings and species used in landscaping.

The proposal is considered to be consistent with the desired development outcomes of the Rural 1 Planning Area and approval subject to conditions is recommended.

PLANNING CONSIDERATIONS:

Background

The site consists of one vacant lot that is severed in the north-west corner by a temporarily closed road that is approximately 46.34 hectares in area. The site falls within the Barron River Flood Plain and bounds the Barron River to the south. A smaller creek and associated and riparian vegetation, traverses the site in a general north-south direction.

The western portion of the site is currently cultivated with sugar cane. The central portion contains the abovementioned waterway and established riparian area. The eastern portion is generally grass and weeds and contains a number of demountable buildings and disturbed areas of land resulting from previous earthworks to remove fill material for the construction of the Australian Federal Police canine facility (Development Permit 8/30/148). This facility is now contained within its own 1.394 hectare lot (Lot 2 on SP258914) to the north-east of the site.

A low wire fence extends along the Machans Road frontage of the site. Along the boundary with Lot 2 on SP258914 is a 2 metre high fence topped with barbed wire. Vehicular access from Machans Road is from a point adjacent to the common boundary. A turning lane and associated street lighting has been provided on the opposite side of the road to the AFP facility. The western portion of the site abuts the Captain Cook Highway.

The eastern portion of the site has historically, has been used for sugarcane growing purposes. However, due to the poor soil type and low-lying nature of the land the agricultural pursuits have not been sustainable.

The site is surrounded by other rural uses and is approximately 600 metres from the residential area of Machans Beach. Cairns Airport is located on the southern side of the Barron River as are a number of industrial and commercial uses. Approximately 2.5km to the north are is the Cairns Kart Hire Track and Golf Centre.

Proposal

The Applicant seeks approval for a Material Change of Use of the site to Outdoor Sport & Entertainment, specifically for three (3) types of motorised recreational vehicle tracks within an area of approximately 13 hectares, in the eastern portion of the site. The three (3) types of motorised recreational vehicles and their associated tracks and operation are detailed as follows (See Appendix 5 for specifications of each vehicle).

Motorised buggy

The buggy track would consist of a natural ground surface of soil/sand. The Applicant has stated that this would be watered down to minimise dust as required.

There would be two types of buggy: one-seater 72-horsepower 'Redline ATVs' to be driven by the guests themselves and a two-seater, 1290cc 'SXS' to be driven by an experienced driver to take a guest for a 'thrill ride'.

A maximum of two (2) guest-driven buggies would be operation at any one time and only one (1) SXS buggy would be on the track per ride. Each ride would last 2-3 minutes.

Jet sprint boat

The jet sprint boat track would be located in the lower part of the site where there have been historical earthworks carried out and where there is already standing water due to a high water table. The track would consist of a series of twisted, tight-cornered channels of an average 0.5 metres in depth. The channels would not be lined but the banks would be planted.

A jet sprint boat is a high speed small boat approximately 4 metres in length by 1.5 metres in width.

Only one (1) boat would operate on the track at a time and would be driven by an experienced driver to take a guest for a 'thrill ride'. Each ride would last 20-35 seconds.

Electric trike

The electric trikes would have plastic wheels and operate in a similar manner to a golf buggy, with speeds up to 40 kilometres per hour.

The electric trike circuit track would be constructed from hard stand, either tarmac or concrete.

A maximum of five (5) trikes would be in operation at any one time. Each ride would last 7 -10 minutes.

The motorised buggy and jet sprint boat tracks would operate at separate times as the staff would need to drive and marshal at each activity. The electric trike use could potentially operate continuously.

The Applicant has stated that the use would only operate for booked tours of a minimum of twenty (20) people and not for drop-in customers. The intended market would be for corporate team building and social events.

Activities on site would operate during daylight hours, between 9:00am and 5:00pm. The use would potentially operate seven days a week, for twelve (12) months a year but would not likely operate every day. There would be approximately six (6) staff on site at any one time and they would be responsible for signing in the guests, kitting them up with protective clothing and equipment, marshalling the tracks while the use is in operation and driving the jet sprint boat and two-seater motorised buggy.

Two (2) buildings are proposed on site and it is intended that these would be constructed from containers. One building would measure 12 x 12 metres and provide an office and kit storage area at ground floor and a spectator viewing area at the partial second storey. The maximum height of the building would be 5.2 metres. The second building would provide male and female amenities and measure 5 x 2.4 metres, with a height of 2.6 metres.

A car park with space for thirty (30) cars is proposed to be provided, to be accessed by a 400 metre long driveway. The buildings, car park and tracks would be connected by pathways delineated by ropes or plantings.

All motorised recreational vehicles associated with the use would be stored, serviced and maintained offsite.

CairnsPlan Assessment

CairnsPlan Cairns Beaches Planning District		Code Applicability	Compliance
Planning Area	Rural 1	✓	The use is identified as code assessable and complies with the relevant Code provisions in relation to built form and protecting rural uses and the scenic landscape. The impact of the use on the amenity of adjoining uses and nearby residential uses, particularly in terms of noise, is discussed below.
Land Use	Outdoor Sport and Entertainment	✓	No relevant code.
	Vegetation Conservation & Waterway Significance	✓	The proposed use would be sited in a portion of the site that is not affected by vegetation or waterways. However, due to the proximity of the proposed works and activities to both, relevant conditions have been included to ensure their protection.
	Potential or Actual Acid Sulphate Soil Material	✓	Works to create the jet sprint boat track may result in a disturbance of potential acid sulfate soils, although this is considered unlikely considering that the soil is sand-based. A condition has been included to require that if acid sulfate soils are found to be present, treatment must be undertaken in accordance with the <i>'Queensland Acid Sulfate Soil Technical Manual'</i> .

	Flood Management	✓	Only two (2) buildings are proposed on site. A condition requires that the floor level for all buildings and on-site storage facilities for fuels, chemicals and motorised recreational vehicles shall be provided 1% AEP flood immunity.
	Operational Aspects of the Cairns International Airport	✓	Conditioned to comply - see detailed discussion below.
General	Excavation and Filling Code	✓	If proposed earthworks to construct/shape the jet sprint boat track would exceed 50m ³ then a Development Permit for Operational Works would be required. A drainage study and drainage management plan are required to be submitted for the proposed works and resulting use. Aside from limited potential filling to provide appropriate flood immunity to the buildings, no other earthworks would be required.
	Infrastructure Works Code	✓	The site is not serviced by Council's reticulated sewerage and the Applicant has submitted an on-site wastewater report for the proposed use. A condition restricts the maximum flow per day to be match the stated capacity in the report. The site is serviced by existing water, electricity and telecommunications infrastructure and no change to the existing arrangements is proposed.
	Landscaping Code	✓	A condition requires that a landscaping plan be submitted to include species that will achieve specific outcomes in terms of visual screening from the road, noise attenuation to nearby residential properties and no encroachment into the operational airspace of the Airport. Appropriate species would also be required to be selected to not attract birds or bats.
	Parking & Access Code	✓	An existing right-turn storage area for east-bound traffic is provided to front of the Australian Federal Police canine training facility on Lot 2 SP258914, to the north-east of the site. This would provide sufficient area to cater for the traffic turning right into the subject site. There is no car parking rate specified for the type of use proposed, therefore, the rate of car parking has been determined by considering the nature of the proposed facility and reviewing the rates prescribed for other uses which are similar to the proposed development. It is proposed to provide thirty (30) car parking spaces on site. These would be accessed by a 6 metre wide driveway. Conditions require that these are sealed, drained and line-marked and external works are required to construct a bitumen crossover and turn-out.

	Development Near Major Transport Corridors & Facilities	✓	The site adjoins two Major Transport Corridors. The proposed vehicular access arrangements comply with Code provisions. Conditions are applied in relation to landscaping and advertising devices.
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Compliance Issues

Operational Aspects of the Cairns International Airport

The site is located directly under the flight path of the Airport and as such is contained within a number of Overlays relating to its safety and operation. Each of these is addressed below.

Protection of Operational Airspace

The Obstacle Limitation Surface (OLS) over the site ranges from 5.0 metres AHD on the eastern boundary to 46.0 metres AHD on the western boundary (see Appendix 7). The proposed office/spectator viewing building and amenities building would have heights of 5.2 metres and 2.6 metres respectively. While it is considered that these could fall under the OLS, it is considered reasonable to condition the submission of a detailed drawing that shows the height of both buildings in AHD. It is also possible that machinery relating to construction and other works on site could temporarily intrude into the OLS and a condition requires that the Airport is notified in advance if this is to occur.

No concern is raised in relation to intrusion in to the PANS-OPS.

The potential emissions generated by the proposed use that could affect visibility or engine operation would be dust from the buggy track and from the car parking area. A condition requires that a Construction and Operational Management Plan be prepared detailing dust mitigation strategies. The car parking and driveway areas would also be required to be sealed.

Managing Bird and Bat Hazard to Aircraft

The proposed use is Outdoor Sport and Recreation and would be located within the 3km radius of Cairns Airport. The proposed use is unlikely to generate potential food and waste sources that would attract birds and bats but it is considered reasonable to condition that all waste storage is covered and not accessible to wildlife.

It is likely that the activity and noise associated with the proposed use would deter wildlife from the site. However, it is considered reasonable to condition that all landscaping includes recommended species for ornamental use as in the Cairns Airport Land Use Plan (Table A02.1) (refer to P04, A04.2 of the SPP Code: *Strategic airports and aviation facilities* is included in Condition 11 'Landscaping Plan'.

ANEF

The development would be located in an area of the site that falls within the 25 ANEF and 35 ANEF noise contours. As such, the Australian Standard AS2021 (2015) *Acoustics-Aircraft Noise Intrusion – Building Siting and Construction* would apply to the office/spectator viewing building and a condition requires this.

Airport Public Safety Area

The Public Safety Area (PSA) is the area at the end of the airport runway where there is potentially an increased risk of a aircraft accident occurring. The eastern portion of the site is located within this area (see Appendix 7). The submitted plans indicate that all elements of the proposed development would be located outside of the PSA and a condition also requires this.

Lighting Hazards

The site falls within Light Zones B, C and D and whilst the proposed use would be only operating during daylight hours (9am to 5pm), it is considered reasonable to condition that any external lighting that is installed on the site has regard to the CASA Manual of Standards.

Impact on Amenity of Adjoining Residential Uses

The Applicant engaged GHD to undertake a noise assessment of the proposed development to determine if there was likely to be any adverse noise impact from the development on the nearby sensitive receptors. A copy of the Noise Assessment Report is included at Appendix 6 to this report.

The test scenario for the report was based on three (3) motorised buggies in operation at the same time in the area to be used for the buggy track over periods of 5 – 7 minutes. Recordings were taken at identified sensitive receptors being the AFP building on the adjoining site and at a point adjacent to the closest House on Christensen Street. It should be noted that it is only proposed to operate a maximum of (2) motorised recreational vehicles at a time on this track and therefore the noise recorded for the report is greater than what would be generated from the proposed use.

The report indicates that ambient noises sources, such as birds, dogs barking, traffic and aircraft dominate the noise environment. Therefore, the noise measurement results indicate that the noise expected to be generated from the proposed Outdoor Sport and Entertainment land use will be within the accepted levels and not exceed the noise criteria at the sensitive receptors.

It is considered reasonable to restrict the daily hours of use of the site from 9am to 5pm, as this is what is intended by the Applicant. A condition also requires that landscaping buffers be planted to the eastern boundary and road frontage to assist with noise amelioration. A condition would also restrict the maximum number of motorised buggies and jet sprint boats operating at any one time to two (2).

Barron River Flood Plain

The site is within the Barron River flood plain where tourist related uses are not usually supported. Generally, Council's position is that the flood plain area should remain as rural based land use with some opportunity for recreational uses, where appropriate and not requiring significant engineering design and construction to overcome flooding issues. Considering the minor scale of the proposed use in terms of buildings and infrastructure it is considered that the development is suitable from a flood safety and access perspective, particularly considering that assets relating to the use are largely mobile.

Far North Queensland Regional Plan 2009-2031

The site is designated as being in the Regional Landscape and Rural Production Area. Under this Plan the proposed use is defined as a 'Tourist Activity'. It is considered that the proposed use would comply with all relevant Land Use Policies

State Planning Policy 2014

The following SPP Codes apply to the development.

Appendix 3 SPP Code: *Water quality* applies due to the presence of potential acid sulfate soils in the area of the proposed jet sprint boat track. This is discussed above.

Appendix 5 SPP Code: *Strategic Airports and Aviation Facilities* seeks to ensure that the safety, efficiency and operational integrity of the strategic airport is not compromised. The assessment made under the CairnsPlan Operational Aspects of Cairns International Airport Code complements the SPP provisions and appropriate conditions are included in the recommendation of this report.

Draft Cairns Region Planning Scheme

The Draft Planning Scheme is in its final stages of preparation and will likely be adopted by the end of 2015. As such, the provisions are considered here.

The site would be within the Rural Zone where an Outdoor Sport & Recreation use would be elevated to impact assessable development rather than code assessable as currently. The proposed development would therefore be considered to be potentially in accordance with the intent of the future zoning but would be subject to assessment against the entire planning scheme and would be publicly notified.

Public Notification / Submissions

The application is code assessable and no public notification is required.

State Referrals

The application was referred to the State Assessment Referral Agency (SARA) as the application triggered referral for the site's proximity to a State Controlled Road and being located within a Coastal Management District.

SARA responded (see Appendix 3) with conditions requiring that the development must be carried out generally in accordance with the submitted plans; that sediment and erosion control measures be implemented during works; and acid sulfate soils must be treated if found to be present.

Advice was also included that the application should be considered against the provisions of the State Planning Policy (SPP) Code (July 2014), Appendix 5 - *Strategic Airports and Aviation Facilities* to ensure the safety, efficiency and operational integrity of the strategic airport is not compromised. Assessment against the SPP is made earlier in this report.

The application was also referred to Cairns Airport for Third Party Advice as a portion of the site and part of the proposed 'jet sprint' boat track would fall within the mapped Public Safety Area of the airport. Cairns Airport responded raising a number of concerns in relation to the potential impact on the operational efficiency and safety of the airport with regard to high intensity approach lighting, dust, wildlife attracting uses and the potential height of structures. Assessment against the CairnsPlan 'Operational Aspects of Cairns International Airport' and the State Planning Policy – Appendix 5 SPP Code: Strategic airports and aviation facilities is included in the above report.

INFRASTRUCTURE CHARGES:

It is noted that under Council's Adopted Charges Resolution 2015 the site is located outside the catchments contained in Map 1 and therefore the Maximum Charge rate for a use applies. However, a Motor Sport Facility use (SPRP (adopted charges) categories) does have an identified demand rate on which to base calculations. In this respect, such a use would fall under 'other uses not listed'. The Resolution states that for 'Other uses not listed' the maximum adopted charge contained in this table is the charge that appropriately reflects the use at the time of assessment.

The demand generated by the proposed use would be most similar to that of a Tourist Facility use and this has been used to calculate the infrastructure charges. The gross floor area of the use is comprised of the 144m² office/spectator viewing area and 12m² amenities building, a total of 156m². The impervious area has been approximated and consists of the electric trike track, buildings, car park and driveway.

As the site is not connected to Council's reticulated wastewater system a 35% reduction is given. As the site is currently only used for agricultural purposes, the only credit applied is for a 'Dwelling House – 3 or more bedrooms'. The Infrastructure Charges calculations are attached at Appendix 4.



Claire Garner
Planning Officer
Action Officer



Peter Boyd
Manager Strategic Planning & Approvals



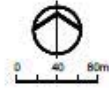
Kelly Reaston
General Manager Planning & Environment

APPENDIX 1 APPROVED PLAN(S) & DOCUMENT(S)

PROPOSED OUTDOOR SPORT AND ENTERTAINMENT

Machens Beach Road, Machens Beach
Lot 3 on SP260914

Parish of Smithfield
County of Nares
City of Cairns



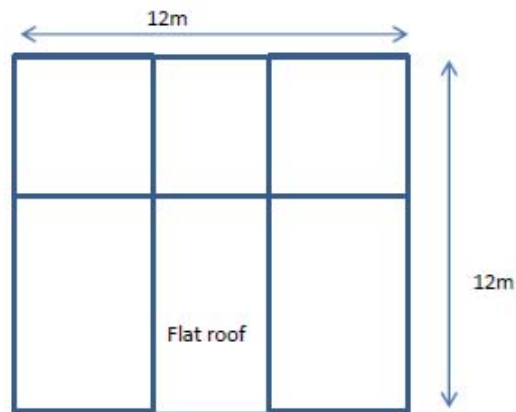
The plan is conceptual and for discussion purposes only. All areas, dimensions and site data are preliminary, subject to investigation, survey, engineering, and Local Authority and Agency approvals.

3m brozier mom
Date: 9th September, 2016
Scale: 1:4000 @ A3
Drawn: A.A.
Job No: 336761-1
Plan No: 33676/001 F
1300 267 878
www.broziermom.com.au
services | town planning | project management | mapping and GIS

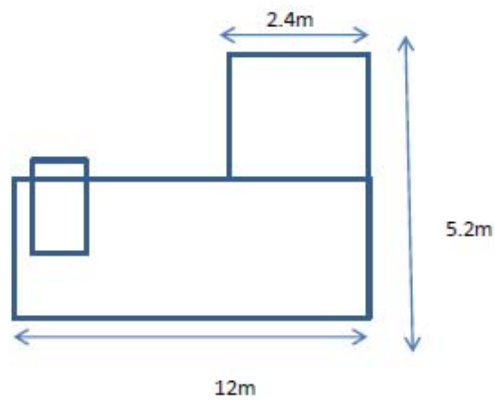
Office and Spectator Viewing Building

The proposed Office and Spectator Viewing Building will be where the customers will complete required sign on and safety briefings and be kitted up with the required protective clothing and equipment. There will also be storage for the protective clothing and equipment. The proposed Office and Spectator Viewing Building will consist of three (3) containers – generally as per the following:

Layout Plan

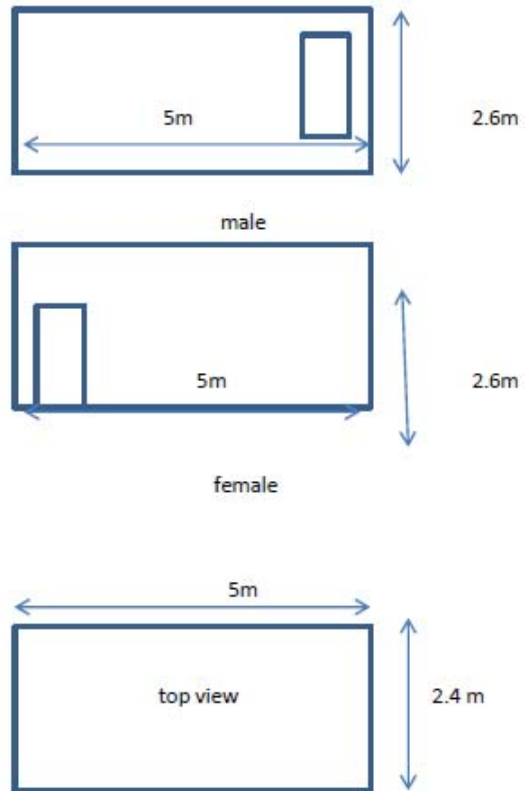


Elevation



Amenities Building

The Amenities Building will consist of a portable donga (toilet block) providing both male and female toilets - generally as per the following



APPENDIX 2: NOTICE OF INTENTION TO COMMENCE USE**Development Permit*****Sustainable Planning Act 2009*****NOTICE OF INTENTION TO COMMENCE USE**

Development Permit	8/7/3316 ELEC
Date of Approval	28 October 2015
Approved Use	Outdoor Sport and Entertainment
Location	3L Machans Beach Road MACHANS BEACH
Property Description	Lot 3 on SP258914

I/we are hereby notifying Cairns Regional Council of my/our intention to commence the approved use outlined above

on _____ (insert date).

I have read the conditions of the Decision Notice issued and believe that all the applicable conditions have been complied with.

Applicant: _____

Address: _____

Contact Phone: _____

Signature of Applicant/Owner

Date: _____

APPENDIX 3: Concurrence agency conditions & requirements



Department of Infrastructure,
Local Government and Planning

Our reference: SDA-0715-022580
Your reference: 8/7/3316 ELEC

28 August 2015

Chief Executive Officer
Cairns Regional Council
PO Box 359
Cairns QLD 4870

Attn: Claire Garner

Dear Sir / Madam

Concurrence agency response—with conditions

Material change of use (outdoor sport and entertainment) at 3L Machans Beach Road,
Machans Beach and more particularly described as Lot 3 on SP258914

(Given under section 285 of the Sustainable Planning Act 2009)

The referral agency material for the development application described below was received by the Department of Infrastructure, Local Government and Planning under section 272 of the *Sustainable Planning Act 2009* on 27 July 2015.

Applicant details

Applicant name:	John Madderom
Applicant contact details:	C/- Brazier Motti Pty Ltd PO Box 1185 Cairns Queensland 4870 cns.planning@braziermotti.com.au

Site details

Street address:	3L Machans Beach Road, Machans Beach
Lot on plan:	Lot 3 on SP258914
Local government area:	Cairns Regional Council

Page 1

Far North Queensland Regional Office
Ground Floor, Cairns Port Authority
PO Box 2358
Cairns QLD 4870

Approved plans and specifications

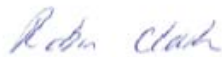
The department requires that the following plans and specifications set out below and in **Attachment 4** must be attached to any development approval.

Drawing/Report Title	Prepared by	Date	Reference no.	Version/Issue
Aspect of development: material change of use (outdoor sport and entertainment)				
Site Plan: Proposed Outdoor Sport and Entertainment	Brazier Motti	28 May 2015	33676/001	E

A copy of this response has been sent to the applicant for their information.

For further information, please contact Bec Turner, A/ Planning Officer, SARA Far North QLD on 4037 3208, or email bec.turner@dilgp.qld.gov.au who will be pleased to assist.

Yours sincerely



Robin Clark
Manager (Planning)

cc: John Madderom, cns.planning@braziermotti.com.au
 enc: **Attachment 1**—Conditions to be imposed
Attachment 2—Reasons for decision to impose conditions
Attachment 3—Further advice
Attachment 4—Approved Plans and Specifications

Our reference: SDA-0715-022580

Your reference: 8/7/3316 ELEC

Attachment 1—Conditions to be imposed

No.	Conditions	Condition timing
Development Permit for a material change of use for outdoor sport and entertainment		
Schedule 7, Table 3, Item 1: State-controlled road—Pursuant to section 255D of the <i>Sustainable Planning Act 2009</i> , the chief executive administering the Act nominates the Director-General of the Department of Transport and Main Roads to be the assessing authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following condition(s):		
1.	The development must be carried out generally in accordance with the following plans: <ul style="list-style-type: none"> Site Plan: Proposed Outdoor Sport and Entertainment prepared by Brazier Motti, dated 28 May 2015, Plan No 33676/001 E. 	At all times
Development Permit for a material change of use for outdoor sport and entertainment		
Schedule 7, Table 3, Item 5: Coastal management districts—Pursuant to section 255D of the <i>Sustainable Planning Act 2009</i> , the chief executive administering the Act nominates the Director-General of the Department of Environment and Heritage Protection to be the assessing authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following condition(s):		
2.	The development must be carried out generally in accordance with the following plans: <ul style="list-style-type: none"> Site Plan: Proposed Outdoor Sport and Entertainment prepared by Brazier Motti, dated 28 May 2015, Plan No 33676/001 E. 	At all times
3.	During the construction phase of the works: <ol style="list-style-type: none"> install and maintain all measures, plant and equipment necessary to ensure compliance with these conditions; only use materials which are: <ol style="list-style-type: none"> clean and free of silt; free from pests, chemicals and other contaminants as defined under section 11 of the <i>Environmental Protection Act 1994</i>; and suitable for the purpose; and promptly remove any material or debris which has been deposited within the coastal management district or tidal waters, other than in accordance with this approval. 	For the duration of the works the subject of this approval
4.	Erosion and sediment control measures are to be installed and maintained to prevent the release of sediment to tidal waters.	Prior to commencement of the works and maintained until their completion
5.	Any disturbed or oxidised acid sulfate soil must be treated and managed in accordance with the current <i>Queensland Acid Sulfate Soil Technical Manual: Soil Management Guidelines v4.0</i> , prepared by the Department of Science, Information Technology, Innovation and the Arts, 2014.	For the duration of the works the subject of this approval

Our reference: SDA-0715-022580
Your reference: 8/7/3316 ELEC

Attachment 2—Reasons for decision to impose conditions

The reasons for this decision are:

- to ensure the development is carried out generally in accordance with the plans of development submitted with the application,
- to ensure the development avoids or minimises adverse impacts on coastal resources and their values, and
- to ensure any disturbance of acid sulfate soils is managed to prevent impacts on the coastal environment.

Our reference: SDA-0715-022580

Your reference: 8/7/3316 ELEC

Attachment 3—Further advice

General advice	
Ref.	Advertising Device
1.	<p>A local government should obtain Department and Transport and Main Roads (DTMR) advice if it intends to approve the erection, alteration or operation of an advertising sign or another advertising device that would be visible from a state-controlled road, and beyond the boundaries of the state-controlled road, and reasonably likely to create a traffic hazard for the state-controlled road.</p> <p>Note: DTMR has powers under section 111 of the <i>Transport Operations (Roads Use Management – Accreditation and Other Provisions) Regulations 2005</i> to require removal or modification of an advertising sign and/or a device which is deemed that it creates a danger to traffic.</p>
Ref.	State Planning Policy July 2014 interim development assessment provisions
2.	<p>Cairns Regional Council, in its role as assessment manager, must assess the development application against the State Planning Policy July 2014, and in particular the interim development assessment provisions, such as Biodiversity, Coastal environment, Natural hazards, risk and resilience, and Strategic airports and aviation facilities and to the extent it is relevant to the proposed development.</p> <p>In particular, it is noted the subject site is mapped within the public safety area of a strategic airport and requires local government to assess the development application against the State Planning Policy July 2014 code, Appendix 5 - Strategic Airports and Aviation Facilities.</p>
Ref.	Native Vegetation and Marine Plants
3.	<p>The subject site is mapped as containing native vegetation, specifically, endangered rainforest vegetation. The proposed development does not involve disturbance to regulated vegetation, therefore did not require assessment for clearing native vegetation.</p> <p>If there is any revision to Plan No 33676/01 E dated 28 May 2015, further consideration of referral triggers will be required to ensure native vegetation and marine plants triggers are not applicable.</p>

Our reference: SDA-0715-022580
Your reference: 8/7/3316 ELEC

Attachment 4—Approved plans and specifications

**PROPOSED
OUTDOOR SPORT AND ENTERTAINMENT**

Maohans Beach Road, Maohans Beach
Lot 5 on SP250914
Parish of Smithfield
County of Nerang
City of Cooma



The plan is conceptual and for information purposes only. All areas, dimensions and lot area are preliminary, subject to investigation, survey, engineering, and Local Authority and Agency approvals.

brazier mcm
 1300 267 878
 www.braziermcm.com.au

Date: 28th May, 2015
 Scale: 1:4000 @ A3
 Drawn: A.L.
 Job No: 336761-1
 Plan No: 02070/001 E

surveying | town planning | project management | engineering and GIS

APPENDIX 5: MOTORISED RECREATIONAL VEHICLE SPECIFICATIONS

SPECIFICATIONS FOR EACH VEHICLE USED AT THE OUTDOOR SPORT & ENTERTAINMENT FACILITY AT MACHANS BEACH ROAD, MACHANS BEACH

REDLINE ATV (BUGGY)

The Redline ATV's are the vehicles that can be driven by the customers themselves. For safety reasons there will be two (2) vehicles permitted on the track at any one time – they will operate such that when the first vehicle reaches the half way point on the track, the second vehicle will be able to commence their ride. If the vehicles get too close then they are stopped and will be restarted in accordance with the safe operating requirements.

For safety reasons there will be marshals around the track to oversee the customers when riding the vehicles. It is noted that the buggies and jetsprint boat will operate at separate times as marshals and safety staff need to attend each one.

Vehicle Specifications

The Redline ATV's comprise of a motor that is an electronically fuel-injected 749 cubic centimeter, liquid cooled, fuel injected, four-cycle, 72 horsepower engine, 5 point seat belts, suspension seats, fox shocks, and full tubular chassis.

Example of the Redline ATV:



SXS VEHICLE (BUGGY)

The SXS vehicle will be used for "thrill rides" and will only be driven by an experienced driver. When customers are being taken on a "thrill ride" – this will be the only vehicle operating on the track. Each "thrill ride" will be two (2) to three (3) minutes.

For safety reasons there will be marshals positioned around the track when customers are taken on a "thrill ride". It is noted that the buggies and jetsprint boat will operate at separate times as marshals and safety staff need to attend each one.

Vehicle Specifications

Specifications:

- 2 seat
- 1.25" front and rear a-arms
- 3" frame ground clearance at full bump
- 16" wheel travel
- 1,300 pound dry weight
- 70" overall width
- 95" wheelbase

Standard items:

- (x2) 15x8 steel rims with (2) Maxxis Ceros 27x11x15
- (x2) 15x7 steel rims with (2) Maxxis Ceros 27x9x15
- Gen 1 Hayabusa motorcycle engine 1290cc
- Reverse gear box (no diff)
- 10" FOX 2.0 air shocks in front
- 14" FOX 2.0 air shocks in front
- Custom aluminum air box with K@N filter
- 8 gallon fuel tank
- Corbeau wide suspension seats
- 5 point harness with 3" padding

Example of the SXS Vehicle:



ELECTRIC TRIKES

The electric trikes are a motorized trike, which operates similarly to a golf buggy. As the trikes are electric and have plastic wheels they will generate very limited noise. The electric trikes have a maximum speed of about 40 kilometres / hour. The electric trikes will ride around a circuit track, constructed of tarmac or concrete. The rides will last for 7 – 10 minutes.

For safety reasons there will be a maximum of five (5) electric trikes operational on the track at one time, there will also be marshals overseeing the customers when riding the electric trikes.

Example of the Electric Trikes:



JETSPRINT BOAT

The jet sprint boat is a high speed small boat, usually just 3.8 to 4.0 metres in length and 1.5 metres in width. The jet sprint boat is driven by a very experienced driver which will take customers on a "thrill ride" which will last for approximately 20 – 35 seconds.

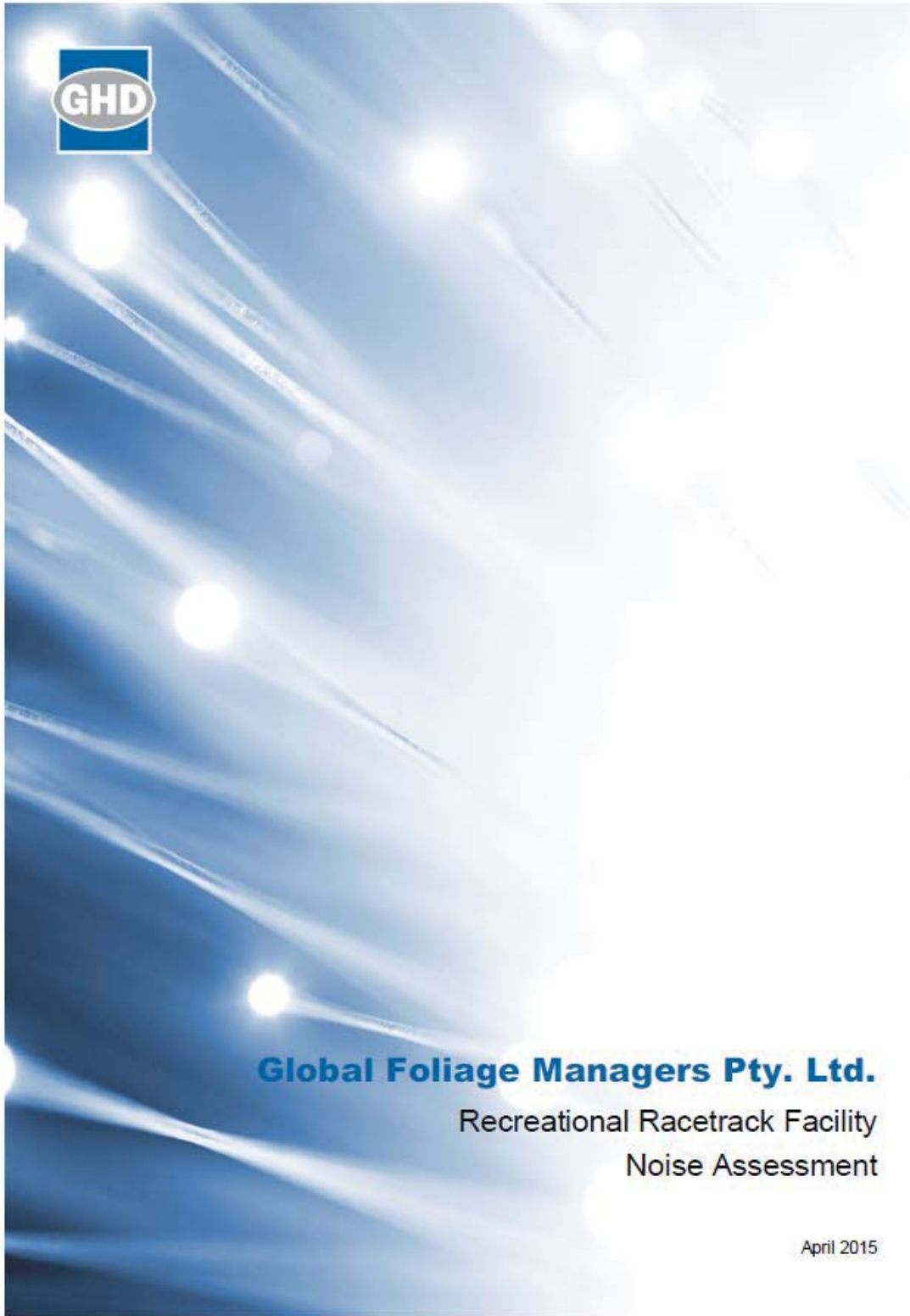
The jet sprint boat will travel around twisting series of channels, which are only required to be an average of 0.5 metres in depth.

For safety reasons there will be marshals positioned around the track when customers are taken on a "thrill ride". It is noted that the jetsprint boat and the buggies will operate at separate times as marshals and safety staff need to attend each one.

Example of Jetsprint Boat:



APPENDIX 6: NOISE ASSESSMENT REPORT



WATER | ENERGY & RESOURCES | ENVIRONMENT | PROPERTY & BUILDINGS | TRANSPORTATION

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Appendices

Appendix A – Attended monitoring charts

Glossary

Terminology	Description
dB	Decibel is the unit used for expressing the sound pressure level (SPL) or power level (SWL) in acoustics.
dB(A)	Decibel expressed with the frequency weighting filter used to measure 'A-weighted' sound pressure levels, which conforms approximately to the human ear response, as our hearing is less sensitive at low and high frequencies.
DEHP	Department of Environment and Heritage Protection
$L_{A90}(\text{period})$	The A-weighted sound pressure level that is exceeded for 90% of the time over which a given sound is measured. This is considered to represent the background noise e.g. $L_{A90}(15 \text{ min})$.
$L_{Aeq}(\text{period})$	Equivalent sound pressure level: the steady sound level that, over a specified period of time, would produce the same energy equivalence as the fluctuating sound level actually occurring.
$L_{Amax}(\text{period})$	The maximum sound pressure level over a specified period of time.
Noise sensitive receiver	An area or place potentially affected by noise which includes: <ul style="list-style-type: none"> • a residential dwelling. • an educational institution, library, childcare centre or kindergarten. • a hospital, surgery or other medical institution. • an active (e.g. sports field, golf course) or passive (e.g. national park) recreational area. • commercial or industrial premises. • a place of worship.

1. Introduction

1.1 Overview and scope

GHD Pty Ltd (GHD) was engaged by Global Foliage Managers Pty Ltd to undertake a noise assessment of the recreational race track facility ('the site') located adjacent to the Cairns Airport.

The scope of the noise assessment involved the following tasks:

- A desktop review was undertaken to identify key environmental noise sources and sensitive receivers from aerial photography.
- Short-term attended noise measurements were undertaken at and around the site to establish background and ambient noise levels. Noise monitoring was undertaken as per the *QLD Noise Measurement Manual* (DEHP 2013) and *AS1055 Description and measurement of environmental noise*.
- Noise goals were based on applicable standards and guidelines.
- The measured noise levels were assessed against the established noise goals.

1.2 Assumptions

The following assumptions have been made for this noise assessment:

- The results are based on the operating conditions encountered at the time of the attended noise monitoring (i.e. the type of cars, speeds, etc.) and cannot be extrapolated to other operating conditions.
- The noise assessment excludes future developments in the area and only assesses noise impacts at existing sensitive receivers.
- The noise impacts have been assessed against the day time period (7am to 6pm) noise criteria. It is assumed that the site would be operational during the day time hours only.

1.3 Limitations

This report has been prepared by GHD for Global Foliage Managers Pty. Ltd. and may only be used and relied on by Global Foliage Managers Pty. Ltd. for the purpose agreed between GHD and the Global Foliage Managers Pty. Ltd. as set out in section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than Global Foliage Managers Pty. Ltd. arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section 1.2 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

2. Noise environment

2.1 Sensitive receivers

The following sensitive receivers and land uses have been identified in the vicinity of the site:

- To the north of the site, residential receivers along Machans Beach Access Road.
- To the north-east of the site, residential receivers along Christensen Street.

2.2 Attended noise monitoring

Attended noise monitoring was undertaken at three locations in the vicinity of the site:

- M1: Just north of the site.
- M2: Adjacent to the Australian Federal Police (AFP) building.
- M3: At the nearest residential receiver along Christensen Street.

The site location and attended noise monitoring locations are shown in Figure 1.

Noise monitoring was undertaken using a SVAN 955 (SN: 27623) set to record typical noise parameters every 1 second. Noise measurements were undertaken in accordance with the *QLD Noise Measurement Manual* and *AS1055 Description and measurement of environmental noise*.

As the site is located directly across from the Cairns Airport runway, numerous aircraft landing and take-off events were recorded during the attended measurements. Noise from aircraft landing, taxiing and taking off was heard continuously at measurement locations M1 and M2. It should be noted that on the day of testing, the aircraft were landing at the closest end of the runway and taking off from the far end. On days with a Northerly wind direction this would typically be reversed, with aircraft taking off at the closest end, resulting in louder aircraft noise levels.

Noise tests for when the racing cars were operating were generally completed over a 5-7 minute period as this is how long the cars typically run.

A summary of the noise measurement results is provided in Table 1. To establish approximate noise levels from the race track, data has been filtered to exclude aircraft take-off and landing events. The attended monitoring data is provided in graphical format in Appendix A.

Table 1 Summary of attended noise monitoring results

Monitoring location	Duration (minutes)	L _{eq} (duration)	L _{eq} (duration)	Observations
M1 (Race track operational) ¹	7	46	57 (overall) <53 (race track)	Noise environment dominated by aircraft landing and take-off. Kart noise audible intermittently.
M1 (Background)	15	41	59	Ambient noise sources included wind through trees and aircraft landings.
M2 (Race track operational) ¹	7	45	62 (overall) <52 (race track)	Noise environment dominated by aircraft landing and take-off. Kart noise audible intermittently.
M2 (Background)	15	41	61	Ambient noise sources included traffic passbys and aircraft landings.
M3 (Race track operational)	8	39	45	Noise environment dominated by birds, passing cars and wind through trees. Kart noise was not audible at this location.
M3 (Background)	15	40	51	Ambient noise sources included birds, dogs barks, traffic passbys and aircraft take-off and landing.
Note 1: The L _{eq} (duration) (race track) exclude noise data from activities not related to the race track (such as aircraft landings and aircraft take-off). Refer to Appendix A for a graphical representation of excluded data.				



Figure 1 Site location and attended noise monitoring locations

3. Noise criteria and assessment

3.1 Noise criteria

3.1.1 Environmental Protection Act

The *Environmental Protection Act 1994* (EP Act) provides for protection of environmental values, including environmental values relating to maintenance of public amenity. In relation to noise, the EP Act is supported by the *Environmental Protection (Noise) Policy 2008* (EPP (Noise)). The EP Act establishes a number of environmental protection policies. Section 7 of the EPP (Noise) outlines the key environmental values for the acoustic environment, as below:

The environmental values to be enhanced or protected under this policy are-

- a. *The qualities of the acoustic environment that are conducive to protecting the health and biodiversity of ecosystems; and*
- b. *The qualities of the acoustic environment that are conducive to human health and wellbeing, including by ensuring a suitable acoustic environment for individuals to do any of the following –*
 - (i) *Sleep;*
 - (ii) *Study or learn;*
 - (iii) *Be involved in recreation, including relaxation and conversation; and*
 - (iv) *The qualities of the acoustic environment that are conducive to protecting the amenity of the community.*

To further assist in determining noise levels consistent with the identified environmental values, the EPP (Noise) also sets out acoustic quality objectives as shown in Table 3-1. Based on a typical dwelling façade noise reduction of 10 dB(A) through a partially open window, an external criterion of 40 dB(A) $L_{Aeq,adj,1hr}$ is recommended for health and well-being in relation to the ability to sleep. Measurement of this acoustic quality objective is at the receptor.

Table 3-1 Acoustic quality objectives for dwellings

Sensitive receptor	Time of day	Acoustic quality objectives (measured at receptor) dB(A)			Environmental value
		$L_{Aeq,adj,1hr}$	$LA_{10,adj,1hr}$	$LA_{1,adj,1hr}$	
Dwelling (for outdoors)	Daytime and evening	50	55	65	Health and wellbeing.
Dwelling (for indoors)	Daytime and evening	35	40	45	Health and wellbeing.
	Night-time	30	35	40	Health and wellbeing, in relation to the ability to sleep.

3.1.2 EPA planning for noise control

In addition to the EPP (Noise), the Planning for Noise Control (PNC) provides guidance on the assessment of operational noise impacts. The guideline includes recommendations for project planning noise levels that are designed to protect receivers from noise significantly louder than background level, and to control background noise creep.

3.1.3 Control and prevention of background creep

The PNC guideline outlines recommended background noise levels to minimise the increase of noise due to new developments over time. Residential areas to the north of the site have been classified as 'Low density residential' (as per the Cairns Regional Planning Scheme Zoning Map ZMD1-D). As the residential area is surrounded by the airport, the PNC Table 1 "Residential area on a busy road or near an industrial area or commercial area" recommended outdoor background noise planning levels have been adopted for this assessment. Adjustments to these levels as per Table 2 of the PNC have been applied. These levels are presented in Table 3-2.

Table 3-2 Recommended outdoor background noise planning levels ($L_{A90, 1 \text{ hour}}$)

Receiver Land Use	Receiver Area Dominant Land Use	Background noise level, $\text{min}L_{A90, 1 \text{ hour}}$ (dBA)		
		Day	Evening	Night
Residential area on a busy road or near an industrial area or commercial area	Residential	45	40	35

3.1.4 Determination of planning noise levels

The planning noise levels are given as categories based upon the description of the surrounding land use and vehicle movement in the vicinity of the area. As such a Z3 (low density transportation) noise area category has been adopted for residential receivers to the north of the site.

The existing level of industrial noise was negligible and the planning noise levels were not reduced (as per Table 4 of the PNC). The project specific noise level is determined by taking the adjusted background noise level shown in Table 3-2 and applying Equation 1 of the PNC. The project specific criteria are detailed in Table 3-3. No tonal or impulse adjustments have been applied to the criteria as the noise source is not expected to be tonal or impulsive.

Table 3-3 Summary of noise criteria at M3, dB(A)

Description	Day	Evening	Night
Measured background L_{A90}	40	-	-
Recommended background L_{A90} (PNC Table 1)	45	40	35
Adjusted background (PNC Table 2)	43	-	- ¹
Existing L_{Aeq}	51	-	-
PNC (Table 3, Category Z3)	55	50	45
Maximum PNC (Table 4), $L_{Aeq, 1 \text{ hour}}$	No adjustment required ²		
Decision Detail Recommendation: $L_{Aeq, 1 \text{ hour}}$ L_{A90} Recommended $L_{Aeq, 1 \text{ hour}}$	□	□	□

1. The PNC acknowledges that it may not be possible to maintain a background level below 25 dB(A) as such a threshold background level of 25 dB(A) is to be used.

2. As the existing level of industrial noise was negligible, there is no need to reduce the planning noise levels as per Table 4 of the PNC.

3. No tonality/impulsive character.

It should be noted that noise criteria above are based on a 1 hour duration while the measurements undertaken were 15 minutes (or less) in duration. For this assessment, the 15 minute measurements are conservatively considered representative of the 1 hour noise levels.

Given the PNC criteria are more stringent than those provided in the EPP (Noise), it is considered that the adoption of the PNC criteria for this project will also ensure compliance with the EPP (Noise).

3.2 Noise assessment

3.2.1 Location M2

The AFP building (M2) has not been considered as a sensitive receiver as it is a K9 building with kennels for dogs and a building for the handlers.

However, the ambient noise levels show that aircraft noise is the dominant noise source and noise from the racing cart facility does not significantly affect the ambient noise environment.

3.2.2 Location M3

The measured L_{Aeq} noise levels were 45 dB(A) during race track operations at location M2. Attended observations indicated that the ambient noise sources (birds, dog barks, traffic passbys and aircraft taking off and landing) dominated the noise environment. Noise from racing vehicles was not audible at this location.

The PNC noise criteria at this location is 46 dB(A). Hence, noise from racing vehicles is not expected to exceed the noise criteria at these sensitive receivers.

4. Conclusion

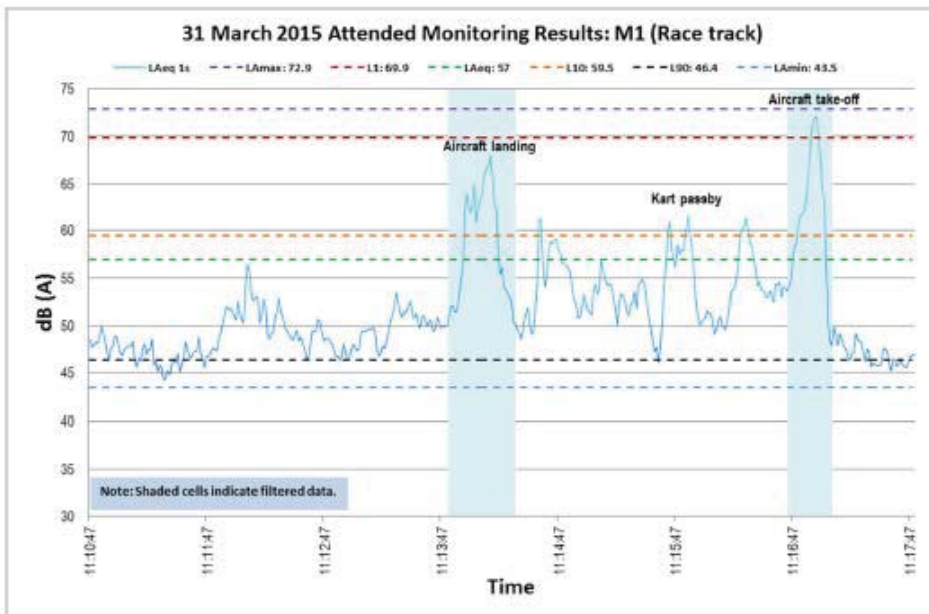
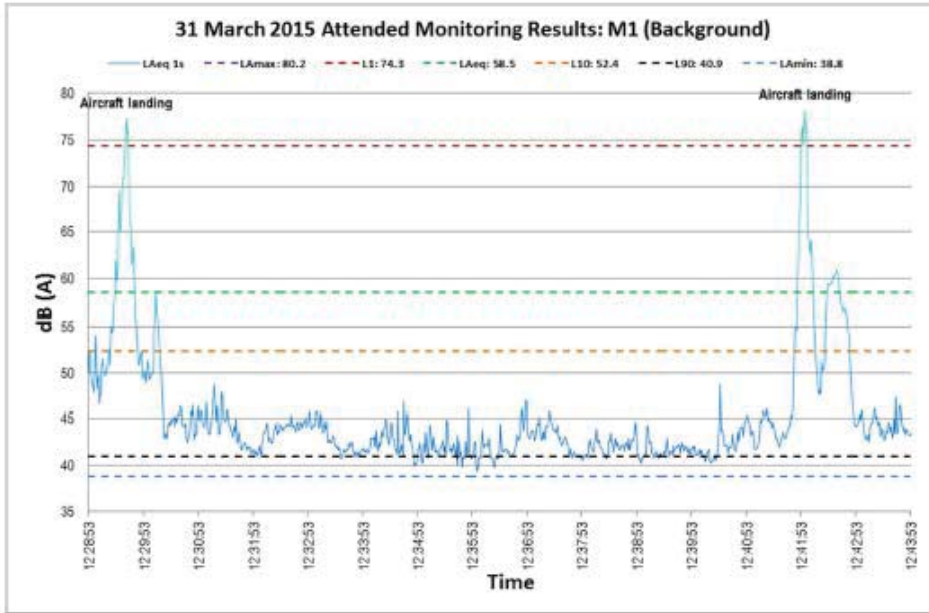
GHD Pty Ltd (GHD) was engaged by Global Foliage Managers Pty Ltd to undertake a noise assessment of the recreational race track facility located adjacent to the Cairns Airport.

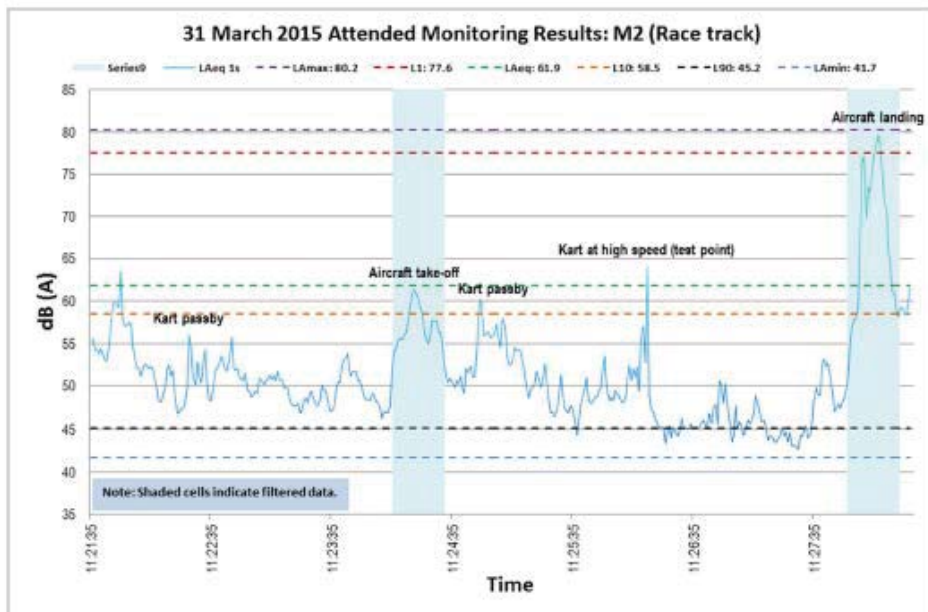
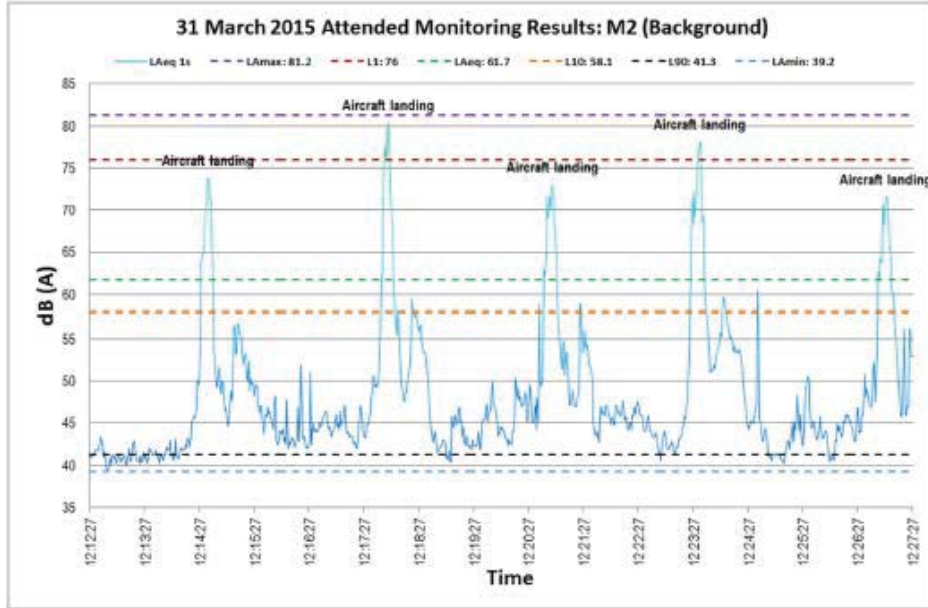
Attended noise measurements were undertaken in the vicinity of the site to measure noise levels from the site and establish operational noise criteria.

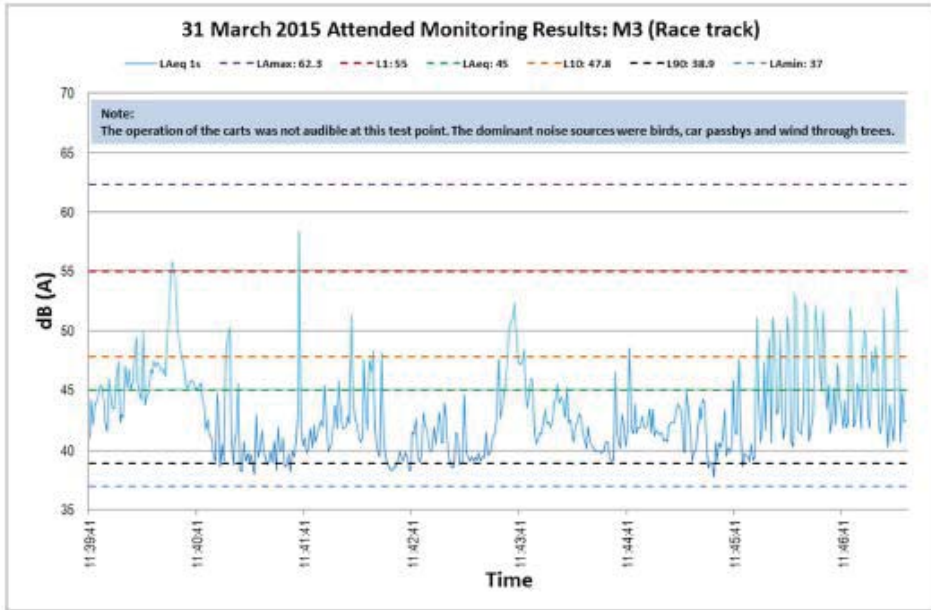
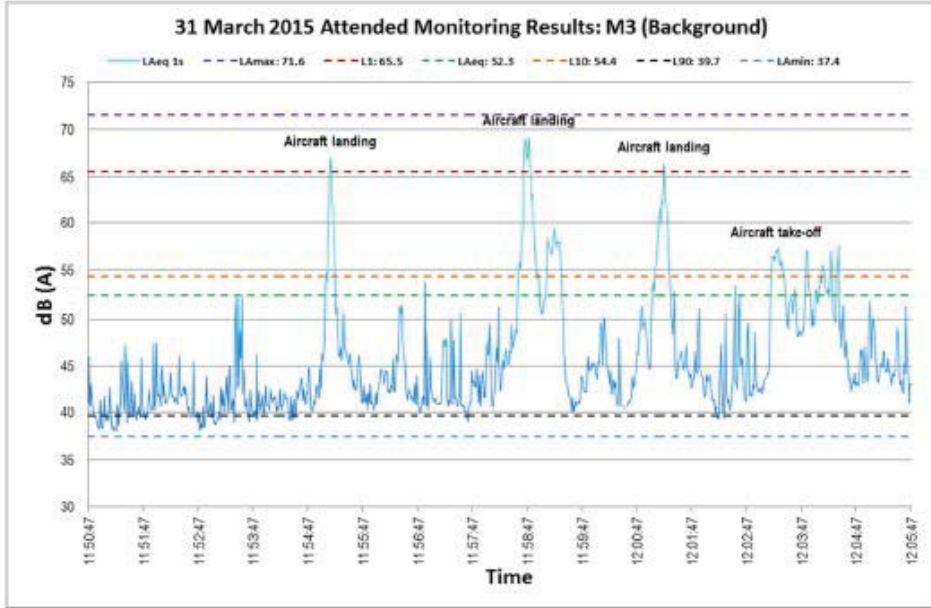
The results of the assessment indicate that the measured noise levels were within the applicable noise criteria during the measurement period.

Appendices

Appendix A – Attended monitoring charts







GHD

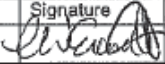
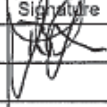
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Document Status

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0	P Pandey	C Evenden		B Heggie		14/04/15

APPENDIX 7: CAIRNS AIRPORT OVERLAYS

