

In the Planning and Environment Court  
Held at: Cairns

No 34 of 2021

Between:	<b>COMMUNITY FOR COASTAL AND CASSOWARY CONSERVATION INC IA13634</b>	Appellant
And:	<b>CASSOWARY COAST REGIONAL COUNCIL</b>	Respondent
And:	<b>MISSION HELICOPTERS PTY LTD ACN 636 565 083</b>	Co-Respondent

### JUDGMENT

Before His Honour Judge Morzone QC  
Date of Hearing: 28 February 2022  
Date of Judgment: 28 February 2022

**THIS MATTER** having this day come on for hearing by way of a Notice of Appeal filed on 5 March 2021 against the Respondent's decision made on 21 January 2021 to approve a Development Application for a Material Change of Use for Air Services (Aviation Facility) [**Development Application**] in respect of land located at 2224 Tully-Mission Beach Road, Mission Beach QLD 4852 and described as Lot 3 on RP732964

**AND UPON HEARING** the Solicitors for the Appellant, the Respondent and the Co-Respondent

#### IT IS ADJUDGED THAT:

- 1 The Appeal be allowed in part;
- 2 The Development Application be approved subject to the amended conditions in the development approval package attached to this Judgment and marked "A"; and
- 3 Each party bear its own costs.

**JUDGMENT**  
Filed on behalf of the corespondent  
Form PEC-7

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Registrar

## A

### Assessment Manager's Conditions:

#### 1. Approved Plans and Supporting Documentation

The development must be undertaken generally in accordance with the application, documentation received by Council on 21 February 2020, 30 March 2020 and 14 October 2020 and 23 November 2020 and plans in the table below, which form part of this approval, except where varied by the following conditions.

Plan/Drawing Number	Plan Name	Date
Plan No. 1190725 Sheet No. 003 Rev D	Facilities Plan	Dated: 15 March 2020 Received by Council: 30 March 2020
Plan No. 1190725 Sheet No. 001 Rev D	Site Plan	Dated: 15 March 2020 Received by Council: 30 March 2020
Plan No. 1190725 Sheet No. 001 Rev D	Elevations Plan	Dated: 15 March 2020 Received by Council: 30 March 2020
No Plan No.	Mission Beach Helicopters Approach/Departure Waypoint Flight Plan	Dated: No Date Received by Council: 14 October 2020
CAAP 92-2(2)	Guidelines for the establishment and operation of onshore Helicopter Landing Sites	Dated: February 2014 Received by Council: 23 November 2020
No Plan No.	Noise Testing Plan prepared by The Acoustic Group and Marshall Day Acoustics	Dated: 22 October 2021
No Plan No.	Noise Testing Results prepared by The Acoustic Group and Marshall Day Acoustics	Dated: 24 November 2021
No Plan No.	Vegetation and Fencing Plan – 4 elements Consulting Plan attached as Annexure A.	Dated: 18 February 2022

#### 2. Hours of Operation and Maximum Flight Movements

- a. The hours of operation (including the take-off, flight and landing of helicopters) are limited to 7:00am – 6:00pm Monday to Friday and 08:00am – 06:00pm Saturday to Sunday.
- b. The maximum number of helicopter movements must comply with section 3.9 of the Noise Testing Results, as follows:
  - i. Bell 206L-3 LongRanger:

- Forty (40) helicopter movements on any single day (8 am – 6 pm), comprising twenty (20) landings, twenty (20) take-offs and 120 seconds of flat pitch idle per movement.
  - Three (3) helicopter movements in any given 1 hour period, comprising two (2) landings and one (1) take-off, or one (1) landing and 2 take-offs.
- ii. Robinson R44 II:
- 80 helicopter movements on any single day (8 am – 6 pm), comprising forty (40) landings, forty (40) take-offs and 120 seconds of flat pitch idle per movement.
  - Eight (8) helicopter movements in any given 1 hour period, comprising four (4) landings and four (4) take-offs.

### 3. Water Connection

Prior to the commencement of the use, the applicant/owner must:

- a. ensure that the development is connected to the existing reticulated water system in accordance with the FNQROC Development Manual (with such connection to be maintained at all times); and
- b. apply to Council's Water Section of the Infrastructure Services Department to install a water service fitted with an appropriate sized water meter at no cost to Council. The fee/charge for the water service connection and any associated upgrades required to be carried out by Council is as per Council's Register of Regulatory Fees at the rate applicable on application and must be paid prior to the works being undertaken.

### 4. On-Site Waste Water Disposal

Prior to the commencement of the use, and at all times, the applicant/owner must ensure that the development is provided with an on-site waste water disposal system which is designed and constructed in accordance with the Queensland Plumbing and Wastewater Code, and the FNQROC Development Manual and to the satisfaction of the Manager Planning Services.

### 5. Car Parking

Prior to the commencement of the use, and at all times, the applicant/owner is to ensure that the development provides a minimum of 9 carparks on the site. All car parking facilities must comply with the following requirements, to the satisfaction of the Manager Planning Services:

- All car parking facilities are designed and constructed in accordance with Australian Standard AS1428 Design for Access and Mobility and Australian Standard AS2890.1 Parking Facilities – Off Street Car Parking; and
- All car parking facilities excluding the disabled carpark are to be to an all weathered gravel surface, drained and maintained.

### 6. Helipad Take Off and Landing

- a. Operation of the landing site is to be in accordance with Section 3.2 of the Noise Testing Plan.

- b. The applicant/owner must ensure that the place of take-off and landing meets the Standards in the Civil Aviation Advisory Publication CAAP 92-2(2) dated February 2014.
- c. Landing and take-off must be undertaken in accordance with section 6.11 (paragraphs 1 to 4) of the Noise Testing Plan.

#### **7. Helicopter Operations – Flight Path**

Helicopter movements to and from the site must use only one flight path. The flight path must be aligned in an east to south-east direction towards the end of Koda Street at Wongaling Beach, in accordance with the path identified on the Mission Beach Helicopters Approach / Departure Waypoint Flight Plan, in order to reduce flight time over Reserve 214.

#### **8. Helicopter Operations – Exclusivity**

The applicant/owner must ensure that all helicopters taking off and landing at the site are operated exclusively by the applicant, Mission Helicopters Pty Ltd; the operator, Kestrel Aviation Pty Ltd; or their successors. Third party commercial operators are not permitted to use the facility.

#### **9. Helicopter Operations – Type of Helicopters**

The applicant/owner must ensure that the only helicopters taking off and landing at the site are:

- a. The Bell 206L Long Ranger, with a maximum take-off weight of 1 800 kg (1.8 t);
- b. The Robinson R44 with a maximum take-off weight of 1 200 kg (1.2 t); or
- c. Such other type/model of helicopter that satisfies the noise level criteria specified in section 4.0 of the Noise Testing Plan, following testing and reporting in accordance with that plan.

#### **10. Vegetation Clearing and Revegetation and Management Plan**

- a. Clearing of native vegetation on the site (including any native vegetation planted in accordance with the approved Plan referenced in c. below) is prohibited.
- b. Any fencing (with the exception of the existing wildlife proof fencing and proposed wildlife proof fencing shown on the Vegetation and Fencing Plan) must not exclude wildlife from any native vegetation.
- c. A Revegetation and Management Plan (Plan) must be prepared by the applicant/owner and endorsed by the Manager Planning Services prior to the commencement of the use. The Plan must:
  - i. depict by metes and bounds description the existing native vegetation on the site and the area to be revegetated under ii. below;
  - ii. provide for the existing east – west aligned native vegetation in the north of Lot 3 on RP 732964 to be widened (in a northerly direction generally in accordance with the Vegetation and Fencing Plan) by the planting of native

species comprising cassowary food plants, to ensure that it remains a viable wildlife crossing point;

- iii. include details of the planting density and species and any separation areas;
- iv. unless the vegetation forms part of the north - south wildlife crossing, or is required to be cleared for the purpose of access to Tully - Mission Beach Road, provide for the current vegetation along the frontage of Lot 3 on RP 732964 to the Tully - Mission Beach Road to be retained and intervening areas to remain as either lawn or shrubs less than 1m, to deter cassowaries and other wildlife from straying into this zone. No cassowary food plants may be introduced into this area;
- v. prohibit the clearing of any native vegetation on the site, including the vegetation planted under ii. above.

#### **11. Erosion and Sediment Controls**

Effective erosion and sediment controls must be maintained during and after the construction, installation and maintenance of the site until there is adequate vegetation cover, paved or other controls to prevent any silt run-off from the site to the satisfaction of the Manager, Planning Services.

#### **12. Stormwater Discharge**

The applicant/owner must ensure that the flow of all external stormwater from the site is directed to a lawful point of discharge, such that stormwater does not adversely affect surrounding properties, to the satisfaction of the Manager Planning Services.

#### **13. Public Infrastructure/Utilities**

Any relocation or alteration to any public utilities (including stormwater infrastructure) in association with building work must be undertaken as required by the relevant service provider and at no cost to Council.

#### **14. Waste Bins and Storage Area**

The waste bin and storage areas must be screened from view of adjoining properties and road frontages, to the satisfaction of the Manager Planning Services.

#### **15. Landscaping**

The applicant/owner is to ensure that all landscaping works are carried out in accordance with 9.4.5 Landscaping Code of the Cassowary Coast Regional Council Planning Scheme 2015.

#### **16. Noise**

- a. The applicant/owner is to ensure that noise (other than noise arising from the take-off, flight or landing of helicopters) must not emanate from the site to a degree that would, in the opinion of the Manager Regulatory Services, create an environmental nuisance having regard to the provisions of the Environmental Protection Act 1994, Environmental Protection Regulation 2019 and Environmental Protection (Noise) Policy 2019.

- b. Noise arising from the take-off, flight or landing of helicopters on the site must comply with the noise level criteria specified in section 4.0 of the Noise Testing Plan and section 3.1 Table 7 of the Noise Testing Results.

#### **17. Air Quality**

The applicant/owner is to ensure that noxious and offensive odours must not emanate from the site to a degree that would, in the opinion of the Manager Regulatory Services, create an environmental nuisance having regard to the provisions of the Environmental Protection Act 1994, Environmental Protection (Air) Policy 2019 and Environmental Protection Regulation 2019.

#### **18. Advertising Devices**

The applicant/owner is to ensure that all advertising devices erected on site are in accordance with 9.4.1 Advertising Devices Code of the Cassowary Coast Regional Council Planning Scheme 2015.

#### **19. Street Numbering/Public Safety**

The applicant/owner is to ensure that the street numbers are clearly identifiable from Tully-Mission Beach Road. Warning or information signs are to be erected at the site where necessary to do so to ensure public safety.

#### **20. Night Lighting**

The applicant/owner is to ensure that all night lighting is designed and constructed to the satisfaction of the Manager Regulatory Services so as to ensure that light emitted from the subject site does not create environmental nuisance in accordance with the provisions of the Environmental Protection Act 1994 and Environmental Protection Regulation 2019.

#### **21. Excavating and Filling**

The applicant/owner is to ensure that all excavating and filling works are carried out in compliance with 9.4.3 Excavating and Filling Code of the Cassowary Coast Regional Council Planning Scheme 2015, to the satisfaction of the Manager Planning Services.

#### **22. Use**

- a Fuel storage in excess of 3000 litres is not permitted on the site. Fuel storage on the site must comply with *AS1940:2017 Storage and Handling of Flammable and Combustible Materials*.
- b No maintenance is to be carried out on the site, with the exception of maintenance required to make a helicopter airworthy for the purpose of flying to a maintenance facility.
- c Use of the site for flight training is not permitted.
- d The site may be used for emergency use in accordance with the provisions of the Planning Act 2016, Disaster Management Act 2003 or other applicable legislation, in which case conditions 2, 6, 7, 8, 9 and 16 may not apply.

## **Referral Agency Conditions**

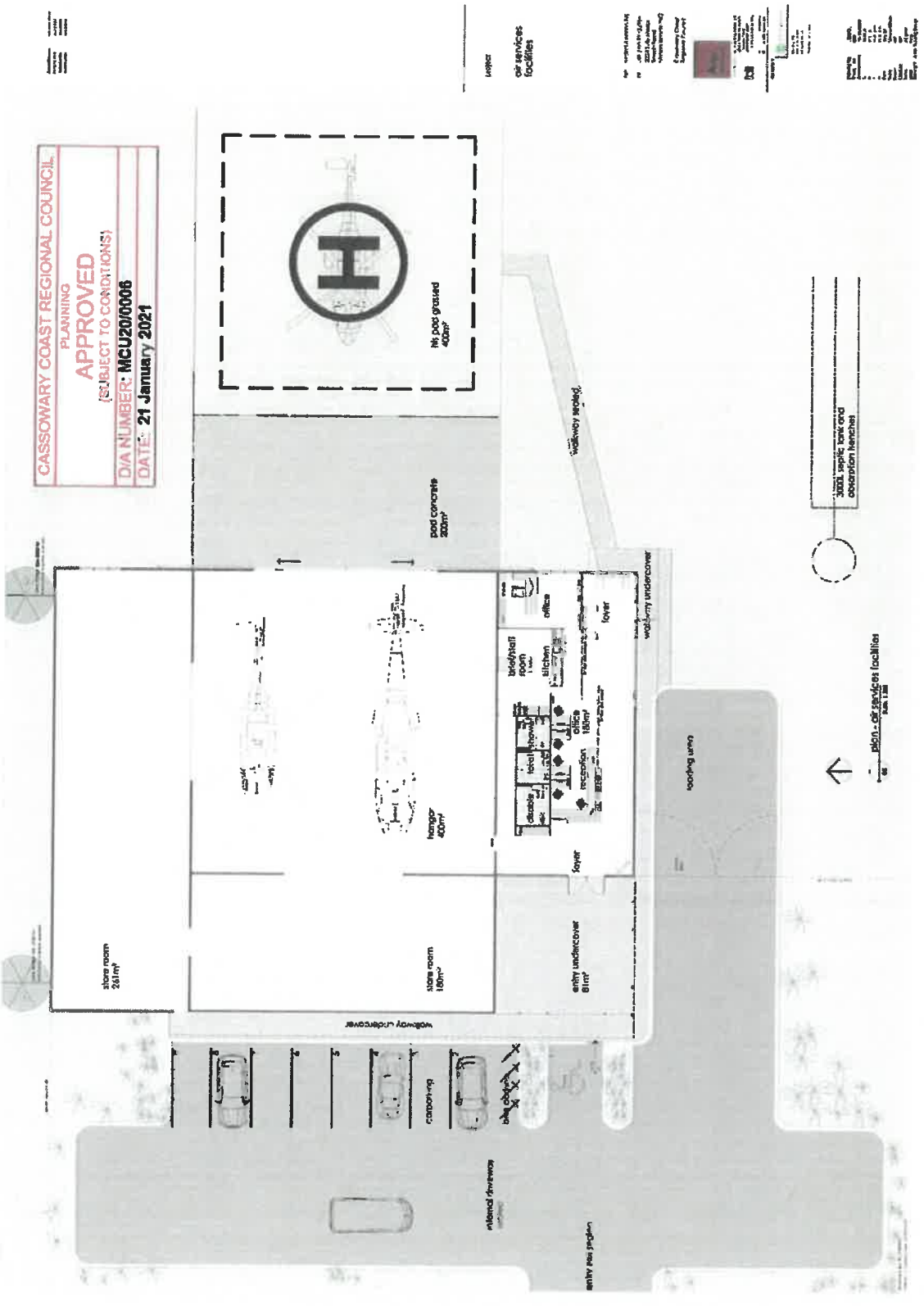
**Attachment A.1** Letter Department of Transport and Main Roads dated 3 April 2020

**Attachment A.2** Letter Department of State Development, Manufacturing, Infrastructure and Planning dated 9 April 2020.

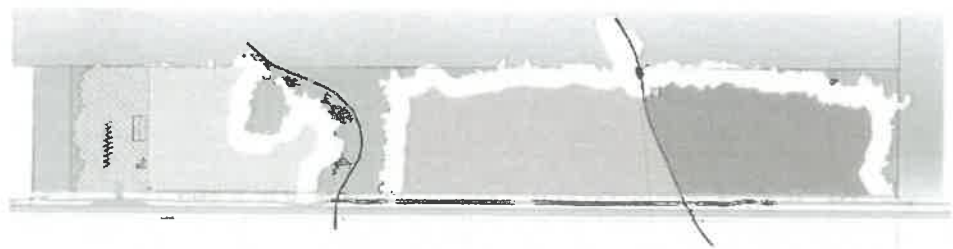


# Approved Plans

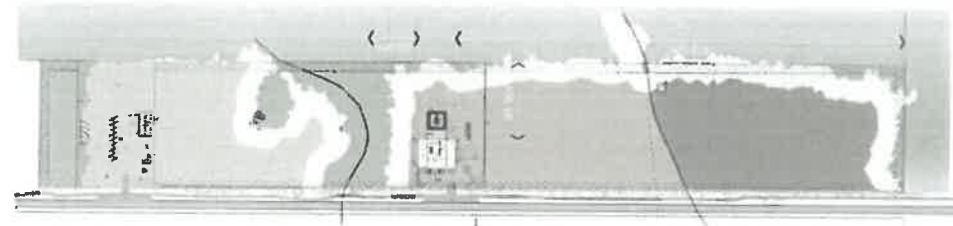
CASSOWARY COAST REGIONAL COUNCIL  
 PLANNING  
**APPROVED**  
 (SUBJECT TO CONDITIONS)  
 DIA NUMBER: MCU20/0006  
 DATE: 21 January 2021



CASSOWARY COAST REGIONAL COUNCIL  
 PLANNING  
**APPROVED**  
 (SUBJECT TO CONDITIONS)  
 D/A NUMBER: MCU20/0606  
 DATE: 21 January 2021



J1 plan - site zones  
 1:000 scale



J2 plan - site development  
 1:100 scale

Scale: 1:1000  
 Date: 21/01/2021

- 1. All buildings shall be constructed in accordance with the Resource Management Act 1991.
- 2. All buildings shall be constructed in accordance with the Resource Management Act 1991.
- 3. All buildings shall be constructed in accordance with the Resource Management Act 1991.
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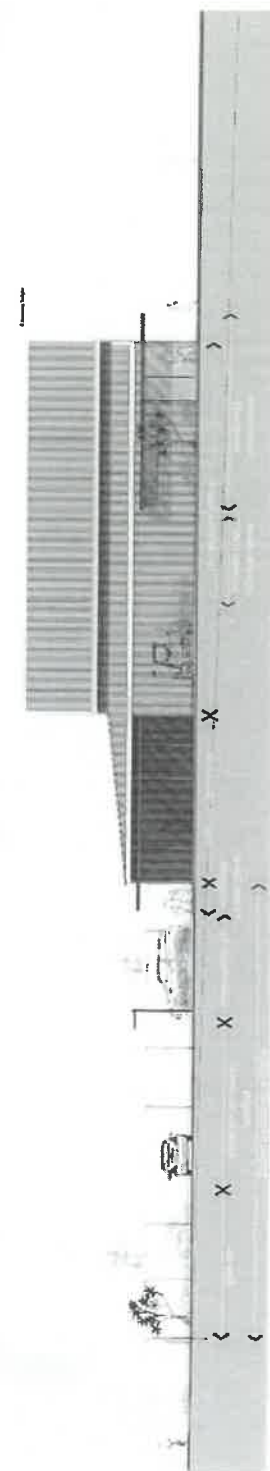


CASSOWARY COAST REGIONAL COUNCIL  
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 Date: 10/12/2020  
 Author: [illegible]  
 Checker: [illegible]

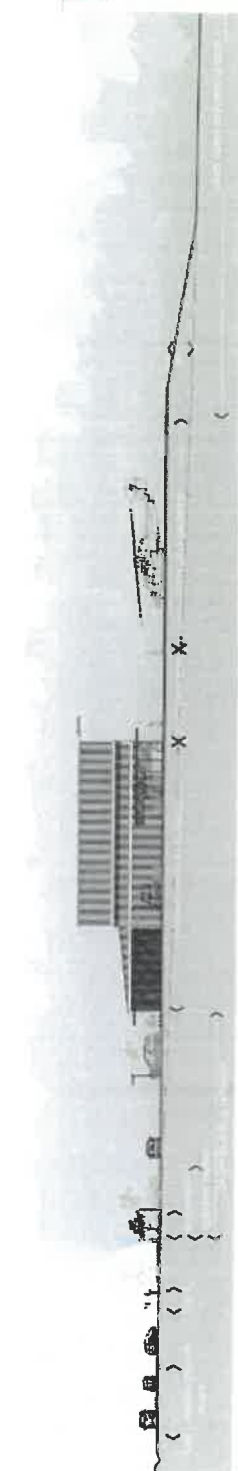


02 west elevation (fully mission beach road) - car services  
 Date: 10/12/2020



03 south elevation - car services  
 Date: 10/12/2020

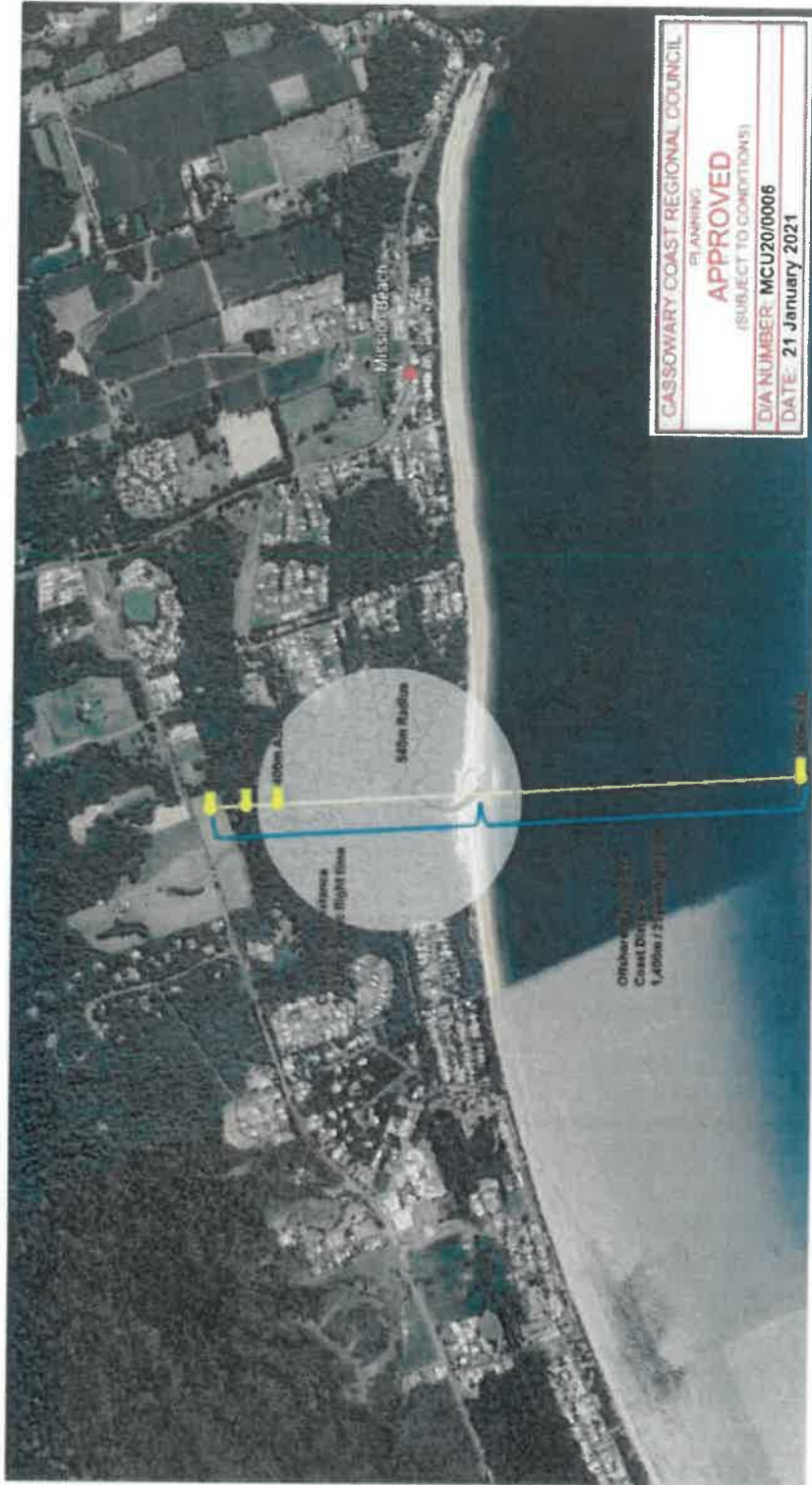
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04 south elevation - car services overview  
 Date: 10/12/2020

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# Mission Helicopters Approach / Departure Waypoint Flight Path





Australian Government  
Civil Aviation Safety Authority

## Civil Aviation Advisory Publication

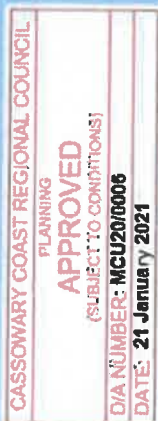
February 2014

Civil Aviation Advisory Publications (CAAPs) provide guidance, interpretation and explanation on complying with the *Civil Aviation Regulations 1988 (CAR)* or *Civil Aviation Orders (CAO)*.

This CAAP provides advisory information to the aviation industry in support of a particular CAR or CAO. Ordinarily, the CAAP will provide additional 'how to' information not found in the source CAR, or elsewhere.

A CAAP is not intended to clarify the intent of a CAR, which must be clear from a reading of the regulation itself, nor may the CAAP contain mandatory requirements not contained in legislation.

*Note: Read this advisory publication in conjunction with the appropriate regulations/orders.*



# Guidelines for the establishment and operation of onshore Helicopter Landing Sites

## This CAAP will be of interest to:

- aerodrome and Helicopter Landing Site (HLS) designers
- current and future Air Operator's Certificate (AOC) holders authorised to conduct helicopter operations
- current and future aerodrome and HLS operators
- HLS certification agents
- helicopter pilots
- suppliers of aerodrome and HLS equipment.

## Why this publication was written

These guidelines set out factors that may be used to determine the suitability of a place for the landing and taking-off of helicopters when the place does not meet the Standards and Recommended Practices (SARPs) for Heliports, as set out in Volume II of Annex 14 to the Convention on International Civil Aviation (the Chicago Convention).

Application of these guidelines will enable a take-off or landing to be completed safely, provided that the pilot in command:

- has sound piloting skills
- displays sound airmanship.

## This CAAP has been re-written to:

- remove reference to the recommended criteria for off-shore resource platform and vessel-based HLS (helidecks), as that information is available now in CAAP 92-4
- assist in the transition to future operational parts to the *Civil Aviation Safety Regulations 1998 (CASR)*.

## Status of this CAAP

This is the third issue of CAAP 92-2 and supersedes CAAP 92-2(1) issued in 1996. The Civil Aviation Safety Authority (CASA) has taken the opportunity to align concepts in this document with emerging terminology until HLS standards are promulgated in the Part 139 Manual of Standards (MOS).

## For further information

Additional copies of this and other related CAAPs may be obtained from the CASA website. For policy advice, contact your local CASA regional office (Telephone 131 757).

February 2014

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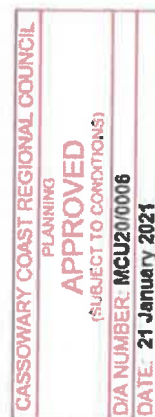
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### 1. Relevant regulations and other references

- Regulations 92, 92A and 93 of CAR
- Part 139 and the proposed Parts 133 and 138 of CASR
- Section 8.11, *Helicopter Areas on Aerodromes*, of the Part 139 MOS
- Aeronautical Information Publication – Aerodromes (AIP-AD)
- Volume II of Annex 14, *Heliports*, to the Chicago Convention
- International Civil Aviation Organization (ICAO) *Heliport Manual* (Doc 9261)
- CASA Policy Notice CEO PN029-2005, available online at: <http://www.casa.gov.au/corporate/policy/notices/CEO-PN029-2005.pdf>
- Part 27 and 29 of the Federal Aviation Regulations (FAR)
- European Aviation Safety Agency (EASA) CS-27 and CS-29
- National Fire Protection Standard NFPA 418-2011

### 2. Acronyms

AGL	Above Ground Level
AIP	Aeronautical Information Publication
AFM	Aircraft Flight Manual
AOC	Air Operator's Certificate
CAAP	Civil Aviation Advisory Publication
CAR	Civil Aviation Regulations 1988
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations 1998
D	D-Value (see Definitions)
DLB	Dynamic Load Bearing
EASA	European Aviation Safety Agency
EMS	Emergency Medical Service
FAR	Federal Aviation Regulation
FATO	Final Approach and Take-off area
HLS	Helicopter Landing Site
ICAO	International Civil Aviation Organization
LSALT	Lowest Safe Altitude



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<b>MOS</b>	Manual of Standards
<b>PinS</b>	Point-in-space Instrument approach and landing procedure
<b>OEI</b>	One Engine Inoperative
<b>RD</b>	Rotor Diameter (see Definitions)
<b>RPT</b>	Regular Public Transport
<b>SARPs</b>	Standards and Recommended Practices
<b>TD/PM</b>	Touchdown/Positioning Marking
<b>TLOF</b>	Touchdown and Lift-off Area
<b>VHF</b>	Very High Frequency
<b>VMC</b>	Visual Meteorological Conditions



### 3. Definitions and other expressions

**Note:** *An expression that is defined in the Civil Aviation Act, the Civil Aviation Regulations or the AIP has, when used in this CAAP, the same meaning as it has in those publications.*

**AIR TAXI** – the airborne movement of a helicopter at low speeds and at heights normally associated with operations in ground effect.

**APPROACH AND DEPARTURE PATH** – the track of a helicopter as it approaches, or takes-off and departs from, the Final Approach and Take-Off Area (FATO) of an HLS.

**BASIC HLS** – a place that may be used as an aerodrome for infrequent, opportunity and short term operations, other than Regular Public Transport (RPT), by day under helicopter Visual Meteorological Conditions (VMC).

**BUILDING** – any elevated structure on land.

**CATEGORY A** – with respect to rotorcraft, means a multi-engine rotorcraft that is:

- (a) designed with engine and system isolation features specified for Category A requirements in Parts 27 and 29 of the FARs or EASA CS-27 and CS-29; and
- (b) capable of operations using take-off and landing data scheduled under a critical engine failure concept which assures adequate designated ground or water area and adequate performance capability for continued safe flight or safe rejected take-off in the event of engine failure.

**D-VALUE (D)** – the largest overall dimension of the helicopter when rotors are turning. This dimension will normally be measured from the most forward position of the main rotor tip path plane to the most rearward position of the tail rotor tip path plane (or the most rearward extension of the fuselage in the case of Fenestron or Notar tails).

**ELEVATED HLS** – An HLS on a raised structure on land with a FATO and a TLOF surface 2.5 m or higher above the ground in the immediate vicinity.

**FINAL APPROACH AND TAKE-OFF AREA (FATO)** – in relation to an HLS, means an area of land or water over which the final phase of the approach to a hover or landing is completed and from which the take-off manoeuvre is commenced.

**FINAL APPROACH** – the reduction of height and airspeed to arrive over a predetermined point above the FATO of an HLS.

**GRAVITATIONAL FORCE** – the acceleration due to gravity, equal to 9.81 m/s<sup>2</sup>.

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**GROUND TAXIING** – movement of a helicopter on the ground under its own power on its undercarriage wheels.

**HELICOPTER VMC** – Visual Meteorological Conditions in relation to helicopters, as detailed in the Aeronautical Information Publication (AIP).

**HELICOPTER LANDING SITE (HLS):**

- (a) an area of land or water, or an area on a structure on land, intended for use wholly or partly for the arrival or departure of helicopters; or
- (b) a helideck; or
- (c) a heliport.

**HELIDECK** – an area intended for use wholly or partly for the arrival or departure of helicopters on:

- (a) a ship; or
- (b) a floating or fixed off-shore structure.



**HELIPORT** – an area that is:

- (a) intended for use wholly or partly for the arrival or departure of helicopters, on:
  - (i) land; or
  - (ii) a building or other raised structure on land; and
- (b) meets or exceeds the heliport standards set out in Volume II of Annex 14 to the Chicago Convention.

**LIFT-OFF** – in relation to a helicopter, means to raise the helicopter from a position of being in contact with the surface of the HLS into the air.

**MOVEMENT** – a touchdown or a lift-off of a helicopter at an HLS.

**ROTOR DIAMETER (RD)** – the diameter of the main rotor with the engine/s running.

**SUITABLE FORCED LANDING AREA** –

- (a) For a flight of a rotorcraft:
  - (i) means an area of land on which the rotorcraft could make a forced landing with a reasonable expectation that there would be no injuries to persons in the rotorcraft or on the ground; and
  - (ii) for a rotorcraft mentioned in (b) below, includes an area of water mentioned in (c) below.
- (b) For paragraph (a) (ii), the 'rotorcraft' is a rotorcraft that:
  - (i) is being used to conduct a passenger transport operation; and
  - (ii) either:
    - (1) is equipped with emergency flotation equipment; or
    - (2) has a type certificate or supplemental type certificate for landing on water.
- (c) For paragraph (a) (ii), the 'area of water' is an area of water:
  - (i) in which the rotorcraft could ditch with a reasonable expectation that there would be no injuries to persons in the rotorcraft or on the water; and
  - (ii) that is:
    - (1) adjacent to an offshore installation with search and rescue capabilities
    - (2) adjacent to land
    - (3) in a location, set out in the exposition or operations manual of the operator of the rotorcraft, that has search and rescue capabilities.

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**SAFETY AREA** – a defined area on a Secondary HLS surrounding the FATO, or other defined area, that is free of obstacles, other than those required for air navigation purposes, and intended to reduce the risk of damage to helicopters accidentally diverging from the load-bearing area primarily intended for landing or take-off.

**SECONDARY HLS** – a place suitable for use as an aerodrome for helicopter operations by day or night that does not conform fully to the standards for a heliport set out in Volume II of Annex 14 to the Chicago Convention.

**TAKE-OFF** – in relation to a stage of flight of a helicopter from an HLS, means the stage of flight where the helicopter accelerates into forward flight and commences climb at the relevant climb speed, or if not intending to climb, enters level flight for the purposes of departure from the helicopter landing site.

*Note: Dependent on the take-off technique being used, the aircraft may be positioned using a vertical or a back-up profile prior to the forward acceleration segment.*

**TOUCHDOWN** – means lowering the helicopter from a flight phase not in contact with the surface of the HLS into a position which is in contact with the surface of the HLS for a landing.

**TOUCHDOWN AND LIFT-OFF AREA (TLOF)** – a defined area on an HLS in which a helicopter may touchdown or lift-off.

## 4. Background

4.1 With the development of the operational parts of the CASR, Australia is moving towards a more ICAO-based set of regulations. In order to meet these requirements, it is necessary to transition operators towards these standards.<sup>1</sup> This CAAP provides guidance on a set of recommended standards acceptable to CASA.

4.2 Presently, paragraph 92(1)(d) of CAR states:

*An aircraft shall not land at, or take-off from, any place unless...the place...is suitable for use as an aerodrome for the purposes of the landing and taking-off of aircraft; and, having regard to all the circumstances of the proposed landing or take-off (including the prevailing weather conditions), the aircraft can land at, or take-off from, the place in safety.*

4.3 The Civil Aviation Act 1988 (the Act) defines an aerodrome, as:

*an area of land or water (including any buildings, installations and equipment), the use of which as an aerodrome is authorised under the regulations, being such an area intended for use wholly or partly for the arrival, departure or movement of aircraft.*

4.4 In the latter definition, the concept of 'authorised' means an aerodrome that is authorised by a certificate or registration under Part 139 of CASR. This concept also applies to aerodromes established under the *Air Navigation Act 1920*; a place for which a requirement of Section 20 of the Act is in force; and to places that are not aerodromes. However, despite these references HLSs are not specifically defined in the CAR.

4.5 Likewise, Part 139 of CASR and its MOS do not (at this time) apply to an HLS unless it is located on an aerodrome. However, since helicopters operate from a variety of locations, CASA publishes guidance on what constitutes a suitable HLS in the form of this CAAP. Nothing in this CAAP should deter any helicopter operators, including those carrying out Aerial Work or other

<sup>1</sup> This will include Performance Class requirements, which may be the subject of a future CAO and Advisory Circular.

CASSOWARY COAST REGIONAL COUNCIL
PLANNING
<b>APPROVED</b>
(SUBJECT TO CONDITIONS)
D/A NUMBER: MCU20/0006
DATE: 21 January 2021

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complex operations, from operating to the higher standards prescribed in Volume II of Annex 14 to the Chicago Convention (Annex 14).

4.6 In keeping with its submissions to ICAO on this topic, CASA recommends owners and operators of an HLS who intend to develop and operate a heliport for the purposes of RPT or Charter operations refer to, and comply with, the SARPs as set out in Annex 14. This does not preclude these types of operations at non-ICAO standard Secondary HLS; however, compliance with suitable operational procedures will be needed to ensure the safety of the operations.

**Note:** *CASA does not expect operators of HLS that do not currently meet the recommended standards set out in this CAAP to upgrade their existing facility immediately, as operational limitations and other risk mitigations may be in place at this time which ensures safety. Nonetheless, CASA encourages operators to adopt these standards when redeveloping current sites or building new HLS.*

## 5. Operational Factors to consider prior to using an HLS

5.1 Helicopter pilots and operators should ensure that:

- the FATO and TLOF are clear of all objects and animals likely to be a hazard to the helicopter, other than objects essential to the helicopter operation
- no person is within 30 m of the closest point of a hovering or taxiing helicopter, other than persons who are essential to the safe conduct of the operation or the specific nature of the task and who are trained and competent in helicopter operational safety procedures

**Note:** *In accordance with CAO 95.7 (paragraph 3.2), pilots must ensure that neither the helicopter nor its rotor downwash constitute a hazard to other aircraft, persons or objects.*

- appropriate information from the owners and authorities is obtained to confirm the suitability of the HLS for the proposed operation
- where the performance information in an Aircraft Flight Manual (AFM) details greater or additional limitations for defined areas or the approach and departure paths (compared to those set out in these guidelines), then the greater and/or additional requirements are available for the flight.

5.2 Except in an emergency, a helicopter should not land at or take-off from an HLS unless:

- the applicable helicopter VMC exist for a flight operating under Visual Flight Rules
- the relevant instructions in the AIP (including AIP Book and ERSA) are followed for the flight
- the following criteria are met for an HLS that is located within controlled airspace:
  - two-way VHF radio communication with the relevant Air Traffic Service unit is established
  - the appropriate Air Traffic Control clearances have been received.

5.3 If a proposed HLS is to be located near a city, town or populous area (or any other area where noise or other environmental considerations make helicopter operations undesirable), the proposal may be subject to the provisions of the *Commonwealth Environment Protection (Impact of Proposals) Act 1974* and parallel State legislation.

5.4 There may be other local legislation that also applies to operations at HLSs. It is helicopter pilots and operators' responsibility to check and adhere to any local rules and regulations.

5.5 With respect to operations in multi-engine helicopters at an HLS, the AOC holder and the pilot-in-command should ensure that the operation complies with the relevant requirements of CASA

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Policy notice CEO PN029-2005. The policy notice is available on the CASA website at <http://www.casa.gov.au/corporat/policy/notices/CEO-PN029-2005.pdf>.

## 6. Attributes of an HLS

6.1 The helicopter is one of the more versatile aircraft and can, if required under special circumstances, operate to and from a space little larger than its overall length. The smaller the site, and the less known about hazards presented by obstacles and surface conditions, the greater the risk associated with its use. The risk presented by such hazards can be reduced when:

- the size of the defined areas of the HLS are greater than the minimum required size
- the pilot-in-command has access to accurate, up-to-date information about the site, which is presented in a suitable and easily interpretable form
- visual information, cues and positional markings are present for the defined areas at the site.

### Defined Areas

6.2 Defined areas are the basic building blocks of an HLS and have a set of attributes that persist even when co-located or coincidental with another defined area. In such cases, the defined area with the more limiting standard would apply.

6.3 Defined areas belong to one of four main categories:

- **FATO** – the area over which the final approach is completed and the take-off conducted
- **TLOF** – the surface over which the touchdown and lift-off is conducted
- **Stand(s)** – the area for parking and within which positioning takes place
- **Taxiways and associated taxi routes** – the surfaces and areas for ground or air taxiing.

6.3.1 A defined area on a landing site may have one or more of three basic attributes:

1. **Containment** – an attribute that affords protection to the helicopter and/or its undercarriage and permits clearance from obstacles to be established. Containment is of two types: undercarriage containment and helicopter containment. Where a defined area (such as a TLOF or taxiway) provides only undercarriage containment, it should be situated within, or co-located with, another defined area (i.e. a FATO, stand or taxi-route).
2. **An additional safety/protection area:**
  - for a **FATO** – a safety area surrounds the FATO and compensates for errors in manoeuvring, hovering and touchdown
  - for a **stand** – a protection area surrounds the stand and compensates for errors of manoeuvring
  - for a **taxiway** – a protection area incorporated in the taxi-route, which compensates for errors of alignment and/or manoeuvring.
3. **Surface loading capability** – this ensures adequate surface strength to permit a helicopter to touchdown, park or ground taxi without damage to the surface of the HLS or helicopter. Surface loading is either:
  - **static** – where only the mass of the helicopter is considered, although elevated heliports/helidecks may include additional factors to protect the building/structure or

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- **dynamic** – where the apparent weight (i.e. a force comprised of multiples of gravitational force) of the helicopter is used. Two types of dynamic loading need to be considered:
  - o dynamic loading due to normal operations
  - o dynamic loading due to a heavy landing, determined by an 'ultimate limit state' test (i.e. touchdown at a rate of descent of 12 ft/s for surface-level heliports).

**Note:** See paragraph 1.2.1.10 and chapter 1.3.2 of the ICAO Heliport Manual; for guidance on surface loading generally and structural design elevated heliports.

In addition to surface loading, durability is also a necessary consideration for the designer. For this reason, likely traffic should be taken into consideration to ensure that the surface loading remains as specified for the life of the facility or the applicable maintenance period. With this in mind, the following section includes guidance for HLS designers when considering these concepts.

## 7. Recommended criteria for an HLS

### 7.1 Basic HLS

7.1.1 Because such HLSs are often developmental and 'basic' in nature, CASA recommends that helicopter operators carry out thorough risk and hazard assessments for the proposed operation and apply appropriate controls to any hazards identified during this process.

7.1.2 Any passengers, crew and operational personnel carried into such locations should be briefed on the hazards of the site and any safety procedures needed to ensure safe loading and unloading at the HLS.

7.1.3 A Basic HLS should:

- be determined, by way of the helicopter operator's risk assessment, to be large enough to accommodate the helicopter and have additional operator-defined safety areas (or buffers) to allow the crew to conduct the proposed operation safely at the location;
- have a TLOF with suitable surface characteristic for safe operations and strong enough to withstand the dynamic loads imposed by the helicopter
- have sufficient obstacle free approach and departure gradients to provide for safe helicopter operations into and out of the site under all expected operational conditions.
- have approach and departure paths that minimise the exposure of the helicopter to meteorological phenomena which may endanger the aircraft and provide escape flight paths, if a non-normal situation arises, which maximise the potential for using suitable forced landing areas.
- only be used for day operations under helicopter VMC or better weather conditions, unless prescribed elsewhere in CASA legislation.

**Note:** *Dynamic load bearing capability assumes all static load limits imposed by the helicopter and any other structure or vehicle will also be met. Operators should ensure this is the case prior to using the site.*

### 7.2 Secondary HLS

7.2.1 Since a Secondary HLS is intended to be used for numerous types of operations (i.e. both day and night under helicopter VMC) its design should at a minimum satisfy the guidelines set out in the following sub-sections.

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**FATO**

7.2.2 The FATO should, at minimum, be capable of enclosing a circle<sup>2</sup> with a diameter equal to one-and-a-half times the D-value (1.5 x D) of the largest helicopter intended to use the site, and be free of obstacles likely to interfere with the manoeuvring of the helicopter.

7.2.3 It is recommended that a safety area extend a distance of at least 0.25 x D or 3 m around the FATO, whichever is the larger, or a greater distance if considered necessary for a particular HLS.

7.2.4 The safety area around a FATO need not be a solid surface. No fixed objects should be permitted on or in the area defined as the Safety Area, except for objects not exceeding a height of 25 cm. Notwithstanding this, designers of an HLS should attempt to minimise obstacles within the FATO, TLOF and Safety Area.

7.2.5 The FATO should provide ground effect, particularly if the associated TLOF is located outside of its defined area.

7.2.6 It is essential that the FATO be capable of at least dynamic load-bearing for the helicopters being operated in performance class 1 or to category A requirements. If the FATO and TLOF are coincident (e.g. on a roof top) then it follows that the whole area should be dynamic load-bearing and provide ground effect.

7.2.7 The mean slope of a FATO should not exceed 5% for 'Category A' operations, 7% for other operations or a lesser percentage if required by the design helicopter AFM. The slope of an associated solid Safety Area should not exceed 4% up away from the FATO.

**TLOF**

7.2.8 The TLOF, being a cleared and stable area capable of bearing the dynamic loads which may be imposed by the helicopter on the site by a heavy landing, should, at a minimum, be an area at least 0.83 x D and may or may not be located within the FATO (see Figure 1).

7.2.9 If the TLOF is not within the FATO, it should be co-located with a stand. In this case the TLOF is also protected by the safety area of the stand.

7.2.10 Any operations from mobile platforms, such as trolleys and carts, in the TLOF should comply with these requirements. Notwithstanding this, CASA does not recommend operations to mobile platforms as this is an operator-based aircraft manoeuvring decision, and guidance on these appliances is not given in this CAAP. The use of ground handling appliances should normally be limited to pre-start and post-shutdown actions and comply with AFM requirements.

7.2.11 The TLOF should provide for adequate drainage to prevent accumulation of water on the surface, but the overall slope should not exceed the maximum slope landing capability of the helicopter. The recommended maximum slope for a TLOF is 2% in any direction.



<sup>2</sup> A FATO may be any shape provided it meets this requirement. Orthogonal shapes may provide better visual cues.



Figure 1 – Secondary HLS: A 1.5 x D FATO with additional 0.25 x D Safety Area (Total area is 2 x D). Also showing 'H', FATO perimeter and 0.5 x D Touchdown/Positioning Markings (TD/PM).

#### Stands

7.2.12 A helicopter Stand should be of sufficient size to contain a circle with a diameter of at least 1.2 x D, plus a 0.4 x D protection area for the largest helicopter that the stand is intended to serve (see Figure 2).

7.2.13 One directional or 'taxi-through' stands should be a minimum of 1.5 x RD for ground taxiing and 2 x RD for air taxiing, including the protection area.

7.2.14 When a helicopter stand is to be used for turning in the hover, the minimum dimension of the stand and protection area should be not less than 2 x D, and suitably larger for wheeled helicopters turning on the ground taking into account the arc, or path, of the tail rotor.

7.2.15 No fixed objects should be permitted within the stand and protection area. All moveable objects, except those essential to the operation (e.g. portable floodlights), should be removed so as not to present a hazard while the helicopter is operating.

7.2.16 If there is a need for more than one stand, locate each with its own TLOF and with its own safety area.

7.2.17 For multiple adjacent stands and related simultaneous operations, refer to the ICAO *Heliport Manual*.



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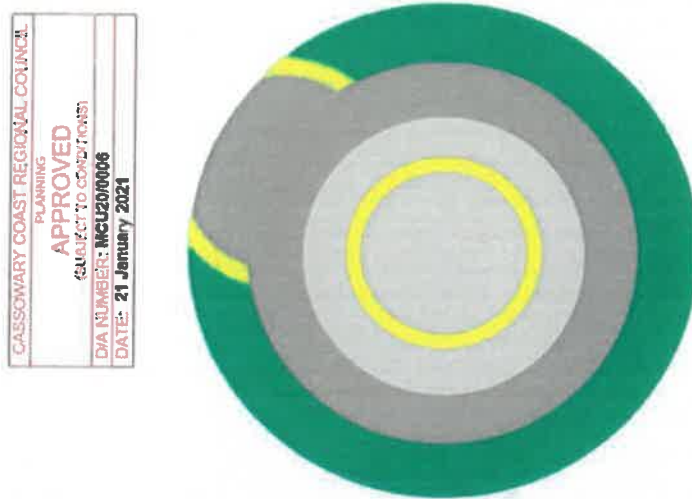


Figure 2 – Helicopter stand: A 1.2 x D stand (dark grey area) with additional 0.4 x D Protection Area (Total area is 2 x D). Also showing a 0.83 x D DLB area (light grey) and TD/PM.

#### Approach and departure paths

7.2.18 The approach and departure paths should be in accordance with the Annex 14 recommendations as illustrated in Figures 3 to 8<sup>3</sup>. The decision on which slope is appropriate for the HLS should be based on which is the most suitable for the performance class of the operations at the site.

7.2.19 CASA recommends application of these standards for RPT, Charter and future Air Transport operations, including emergency medical service (EMS) operations at metropolitan hospital sites. Some helicopters may however require even greater approach and departure path protection dependant on their performance capability.

A minimum of two approach and departure paths should be assigned. These should be separated by a minimum angle of 150°, and may be curved left or right to avoid obstacles or to take advantage of a more advantageous flight paths. This does not preclude one-way HLSs, provided adequate provisions are made for turning, limitations are notified to aircraft operators and any operational risks are suitably mitigated. Any curvature should comply with recommendations contained in ICAO Annex 14 Volume II.

7.2.20 The slope design categories in Figure 3 may not be restricted to a specific performance class of operation and may be applicable to more than one performance class of operation. The slope design categories depicted in Figures 3 and 4 represent recommended minimum design slope angles and not operational slopes:

- slope category "A" generally corresponds with helicopters operated in performance class 1
- slope category "B" generally corresponds with helicopters operated in performance class 3

<sup>3</sup> These diagrams are reprinted from Annex 14 Volume II, *Heliports*, to the Convention on International Civil Aviation 4<sup>th</sup> edition, July 2013.

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- slope category "C" generally corresponds with helicopters operated in performance class 2

7.2.21 Designers and HLS operators are advised that consultation with helicopter operators will help to determine the appropriate slope category to apply according to the heliport environment and the most critical helicopter type for which the heliport is intended. This is particularly true of the raised incline plane procedure outlined in Figure 8.

SURFACE and DIMENSIONS	SLOPE DESIGN CATEGORIES		
	A	B	C
<b>APPROACH and TAKE-OFF CLIMB SURFACE:</b>			
Length of inner edge	Width of safety area	Width of safety area	Width of safety area
Location of inner edge	Safety area boundary (Clearway boundary if provided)	Safety area boundary	Safety area boundary
<b>Divergence: (1st and 2nd section)</b>			
Day use only	10%	10%	10%
Night use	15%	15%	15%
<b>First Section:</b>			
Length	3 386 m	245 m	1 220 m
Slope	4.5% (1:22.2)	8% (1:12.5)	12.5% (1:8)
Outer Width	(b)	N/A	(b)
<b>Second Section:</b>			
Length	N/A	830 m	N/A
Slope	N/A	16% (1:6.25)	N/A
Outer Width	N/A	(b)	N/A
Total Length from inner edge (a)	3 386 m	1 075 m	1 220 m
<b>Transitional Surface: (FATOs with a PinS approach procedure with a VSS)</b>			
Slope	50% (1:2)	50% (1:2)	50% (1:2)
Height	45 m	45 m	45 m

Figure 3 – Recommended dimensions and slopes of obstacle limitation surfaces for secondary HLS visual FATOs

**Note:**

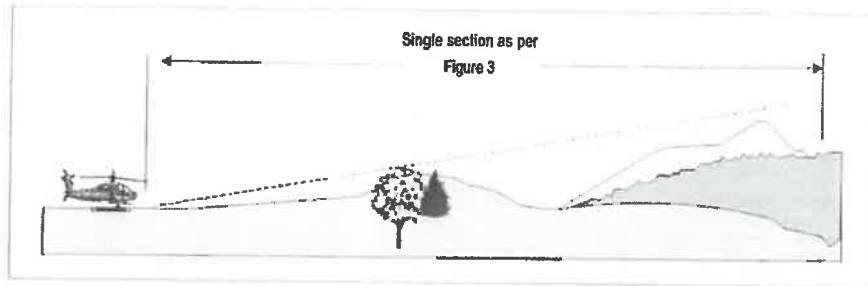
(a) The approach and take-off climb surface lengths of 3 386 m, 1 075 m and 1 220 m associated with the respective slopes, brings the helicopter to 152 m (500 ft) above FATO elevation.

(b) Seven rotor diameters overall width for day operations or 10 rotor diameters overall width for night operations.

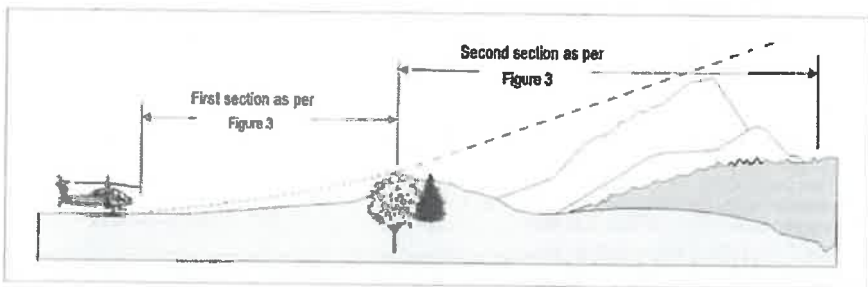


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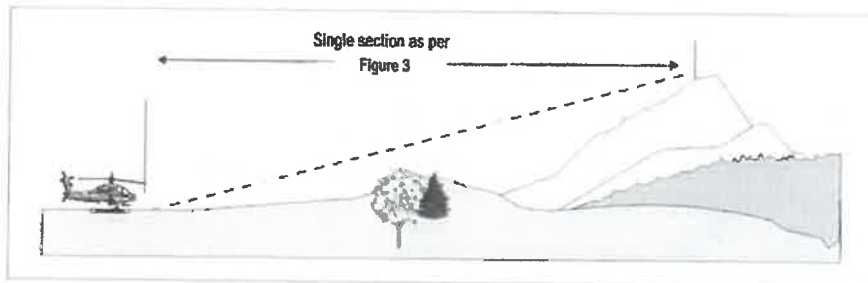




a) Approach and take-off climb surfaces - "A" slope profile - 4.5% design



b) Approach and take-off climb surfaces - "B" slope profile - 8% and 16% design



c) Approach and take-off climb surfaces - "C" slope profile - 12.5% design

Figure 4 – Approach and take-off climb surfaces with different slope design categories



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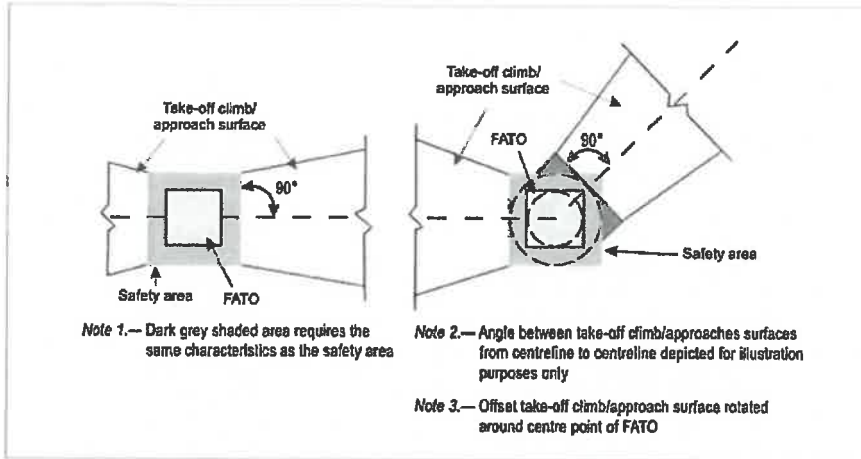


Figure 5 – Obstacle limitation surfaces — Take-off climb and approach surface

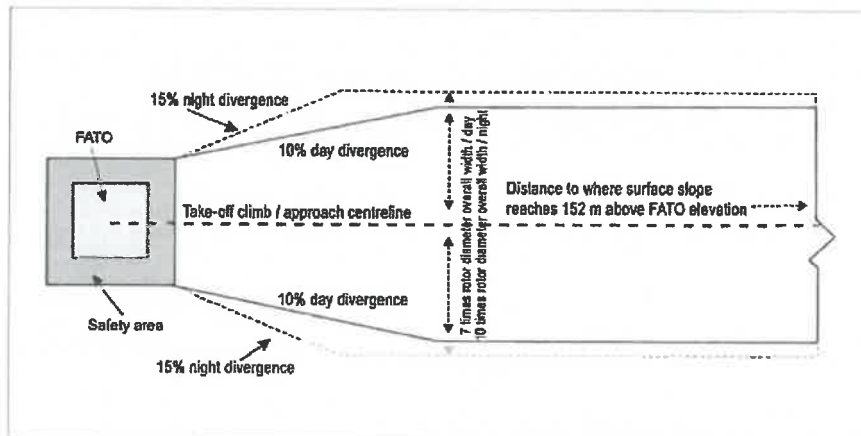


Figure 6 – Take-off climb/Approach surface width



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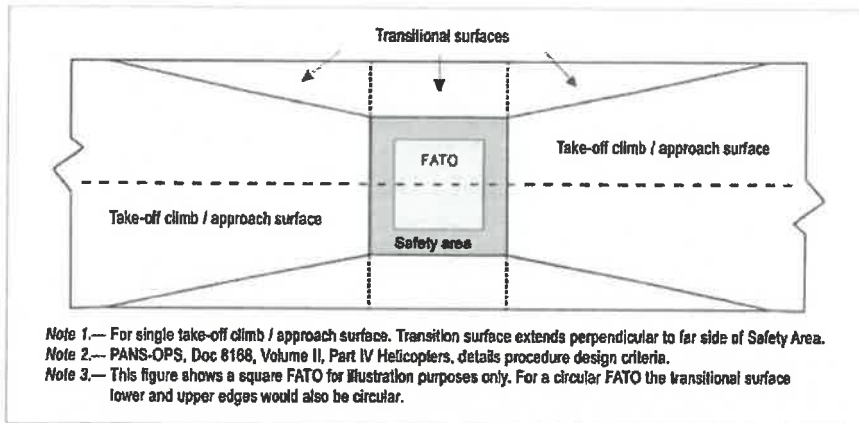


Figure 7 – Transitional surface for a FATO with a Point-In-Space (PinS) approach procedure with a VSS<sup>4</sup>

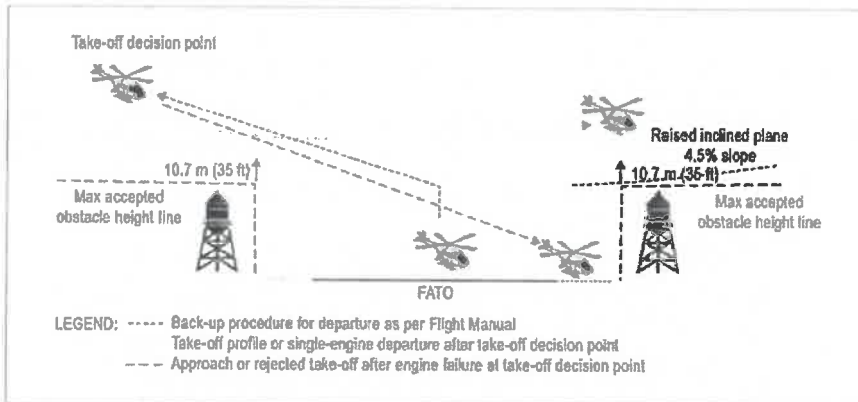


Figure 8 – Example of raised inclined plane during operations in Performance Class 1

**Note 1:** This example diagram does not represent any specific profile, technique or helicopter type and is intended to show a generic example. An approach profile and a back-up procedure for departure profile are depicted. Specific manufacturers operations in performance class 1 may be represented differently in the specific Helicopter Flight Manual. ICAO Annex 6, Part 3, Attachment A provides back-up procedures that may be useful for operations in performance class 1.

**Note 2:** The approach/landing profile may not be the reverse of the take-off profile.

<sup>4</sup> A Transitional OLS is required when a PinS approach is published for the HLS

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**Note 3:** Additional obstacle assessment might be required in the area that a back-up procedure is intended. Helicopter performance and the Helicopter Flight Manual limitations will determine the extent of the assessment required.

**Other physical and ancillary considerations**

7.2.22 An air taxiing route, with a width equal to twice the main RD of the design helicopter, should be provided where the FATO and the TLOF are not coincident.

7.2.23 The HLS should be sited with separate primary and emergency personnel access routes, with both routes located as far apart as practicable.

7.2.24 The HLS should be equipped with suitable fire protection and equipment based on the operations and the types of helicopters in use at the site. At least two fire extinguishers having specifications in accordance with Section 9 of the National Fire Protection Standard NFPA 418-2011 and any additional equipment as may be required to effectively extinguish a fire at the HLS, taking into account the types of operations and aircraft using the facility.

7.2.25 Where more than one fire extinguisher is available:

- at least one extinguisher should be positioned at each of the primary and emergency personnel access routes, preferably without creating potential obstacles to operations
- each separate TLOF or fuelling facility should be equipped with at least one standard fire extinguisher.

7.2.26 Alternative fire-fighting resources providing a similar or better level of protection may be used.<sup>5</sup>

7.3 Markings and indicators for Secondary HLSs

**Wind Indicator**

7.3.1 A Secondary HLS should be equipped with at least one wind indicator measuring 2.4 m in length and visible to the pilot during take-off, approach and landing. More than one indicator may be needed at more complex locations to ensure pilots receive full information on the wind flow over the site.

7.3.2 The wind indicator for night operations should be capable of being lit, or should meet the requirements of Section 7.7 of this CAAP.

**Note:** CASA recommends the surface-level wind indicator standards outlined in Section 5.1.1 of Annex 14 Volume II as an alternative for both surface-level and elevated HLSs.

**HLS identification marking**

7.3.3 An identification marking should be painted on the HLS FATO in the form of a large letter 'H', with dimensions equal to 4 x 3 x 0.75 m (height x width x stripe) and proportionately smaller for smaller facilities. The long side of the marking should be oriented to the preferred final approach paths to the HLS.



<sup>5</sup> Systems in accordance with NFPA 418-2011 would meet this recommendation. Automatic foam monitors are not recommended.

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**FATO edge markings**

7.3.4 The edge of the FATO should be marked with a 30-50 cm wide broken white stripe (or a suitable number of markers), painted to clearly delimit the FATO.

7.3.5 If the FATO is separate from the TLOF, it should be marked so it is easily identifiable to the pilot when conducting operations. The use of aiming point markings may assist in this situation (see below).

7.3.6 A runway-type FATO should be marked in accordance with the standards in Chapter 5 of Volume II of Annex 14.

**Aiming point marking**

7.3.7 An aiming point marking should be provided at the HLS where it is necessary to make an approach to a particular point prior to moving to the TLOF. CASA recommends that any aiming point marking should be in line with the standards outlined in Chapter 5 of Volume II of Annex 14; this may include an internal suitably-sized 'H' marking if required.

**Approach and departure path(s) marking**

7.3.8 Preferred approach and departure paths should be marked with suitably-sized single or double-headed yellow arrows at the perimeter of the TLOF, so as to be viewed easily by the pilot of a helicopter when over-flying or on approach to the site.

**Touchdown/Positioning Marking (TD/PM)**

7.3.9 A TD/PM is essential where it is necessary for a helicopter to touchdown or be accurately placed in a specific position.

7.3.10 A TD/PM provides the visual cues that permit a helicopter to be placed in a specific position and, when necessary, orientated such that, when the pilot's seat is above the marking, the undercarriage will be inside the load-bearing area and all parts of the helicopter will be clear of any obstacles by a safe margin.

7.3.11 A TD/PM should be a yellow circle and have a line width of at least 0.5 m. The inner diameter of the circle should be 0.5 x D of the largest helicopter that the HLS TLOF is intended to serve.

*Note: Further information on touchdown and positioning markings can be found in Chapter 5 of Volume II of Annex 14 and the ICAO Heliport Manual.*

**Maximum operational helicopter tonnage marking**

7.3.12 A maximum *operational* helicopter tonnage marking should be painted on the TLOF (if there is such a limit on the HLS) with the weight, expressed in kilograms to one decimal place, calculated by multiplying the indicator number by 1000.

7.3.13 The tonnage marking figures should be orientated so as to be readable by pilots on the preferred final approach paths to the HLS. This may involve a compromise in orientation.

7.3.14 A facility name marking may also be added, oriented as with the tonnage marking.

*Note: Further guidance on the formatting and style of HLS markings is available in CAAP 92-4.*



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#### 7.4 Night operations at Secondary HLS

7.4.1 For night operations at an RPT, Charter (or future Air Transport) capable HLS, including purpose-built EMS sites, designers should refer to Annex 14 and the ICAO *Heliport Manual*. For other night operations, the following lighting guidelines are suggested; however, designers may apply the ICAO standard if desired.

##### FATO

7.4.2 The edge of the FATO should be lit by either omni-directional green lights or by a combination of markings and shielded perimeter lighting/floodlighting. The lights should be preferably flush with the level of the HLS but otherwise project no more than 25 cm above the level of the HLS. Where lights protrude above the surface of the FATO this should be noted in the HLS's operating information available to pilots. A minimum of eight equally-spaced lights should be used for square, octagonal and circular shaped FATOs, with proportionately more for larger rectangular shaped FATOs.

##### TD/PM

7.4.3 The TD/PM should be lit by either flush-mounted, yellow panel lights or floodlights.

##### Wind velocity information

7.4.4 Wind velocity information may be provided by one of the following:

- an illuminated wind direction indicator as mentioned in Section 7.3 above
- any other suitable means, such as an approved automated weather information station, or
- radio communication with an authorised weather observer located at, or in proximity to, the HLS.

##### Approach guidance

7.4.5 The standard approach direction(s) should be lit by point or panel lights, preferably flush to the HLS surface, depicted by yellow arrows similar in look to the painted markings. When it is considered essential that an accurate approach path be achieved due to the presence of obstacles, additional approach guidance lighting should be provided in accordance with Annex 14. Obstacle lighting should be provided where necessary, or operational limitations applied.

##### Air taxiing route

7.4.6 An air taxiing route should have a minimum width equal to 3 x the main RD of the helicopter and, depending on operational demands, be marked by either blue edge or green centreline lights spaced at 15 m intervals, or be suitably floodlit.

##### Visibility

7.4.7 All lights, except air-taxiing route lights, should be visible from a distance of at least 3 km at the prevailing Lowest Safe Altitude (LSALT) in clear conditions.

**Note 1:** *Neither TLOF lighting or marking is necessary to conform to the guidelines in this CAAP.*

**Note 2:** *Compatibility with Night Vision Devices is not necessary for lighting to conform to the guidelines in this CAAP. Operators and HLS owners who wish to allow night vision imaging system operations into a HLS should liaise with each other to ensure compatible procedures and lighting standards are considered.*

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**7.5 Elevated HLS**

**7.5.1** Elevated HLS should be designed and built in accordance with the guidance in Sections 3.2 of Annex 14 Volume II and the ICAO *Helipport Manual*. However, CASA does not recommend the construction of new elevated HLS with FATO areas less than 1 x D of the design helicopter.

*Note: Readers looking for guidance on the design and operation of off-shore resource platform, off-shore resource ship and marine HLS should read CAAP 92-4.*

Executive Manager  
Standards Division  
February 2014



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<b>Project:</b>	P&E Appeal 34/21 - Mission Helicopters Pty Ltd v CCCC Inc & Anor	<b>Document No.:</b>	Mm 001 R01
<b>To:</b>	Planning and Environment Court C/ Miller Bou-Samra Lawyers	<b>Date:</b>	22 October 2021
<b>Attention:</b>	Ms Leeanne Bou-Samra	<b>Cross Reference:</b>	
<b>Delivery:</b>	Email	<b>Project No.:</b>	20210630 (MDA reference)
<b>From:</b>	Alex Morabito and Steven Cooper	<b>No. Pages:</b>	9
		<b>Attachments:</b>	Yes
<b>Subject:</b>	Noise Testing Plan		

**Distribution:**

Name	Company	Information	Action
Alex Morabito	Marshall Day Acoustics	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Steven Cooper	The Acoustic Group	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Leeanne Bou-Samra	Miller Bou-Samra Lawyers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sangeetha Badya	Holding Redlitch Lawyers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ray Cronin	Mission Helicopters Pty Ltd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lachlan Deen	Marshall Day Acoustics	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**1.0 OVERVIEW**

- 1.1 The following document has been prepared by Alex Morabito (Marshall Day Acoustics) and Steven Cooper (The Acoustic Group) in relation to the proposed use of land at 2224 Tully-Mission Beach Road, Mission Beach (subject site), as a helicopter landing site.
- 1.2 The proposal is subject to proceedings in the Queensland Planning and Environment Court, reference No 34 of 2021.
- 1.3 As per the Court Order, refer Appendix B, this document outlines the “agreed approach,” including the terms of reference, noise level requirements, methodology and reporting for the noise testing associated with the proposed helicopter flight trial at the subject site.
- 1.4 Acoustic terminology used throughout this document is provided in Appendix A.



**2.0 SUBJECT SITE**

- 2.1 Mission Helicopters Pty Ltd (the proponent) has proposed to use land at 2224 Tully-Mission Beach Road, Mission Beach, as a helicopter landing site (commonly referred to as a “helipad”).
- 2.2 The nearest noise sensitive receivers in the vicinity of the site are detailed in Table 1 and shown in Figure 1.

**Table 1: Noise sensitive receivers**

Reference	Address	Relative location to proposed helicopter landing site
R1	<b>2237 Tully-Mission Beach Road</b>	<b>430 m north west</b>
R2	<b>24 Nivosa Court</b>	<b>660 m north east</b>
R3	<b>69 Koda Street</b>	<b>1000 m south east</b>
R4	2116 Tully-Mission Beach Road	500 m south
R5	<b>2 Mission Circuit</b>	<b>450 m south</b>
R6	2117 Tully-Mission Beach Road	510 m south west

Note: **bold** indicate locations where measurements to be undertaken

**Figure 1: Site location and surrounds**



**3.0 PROPOSED USE**

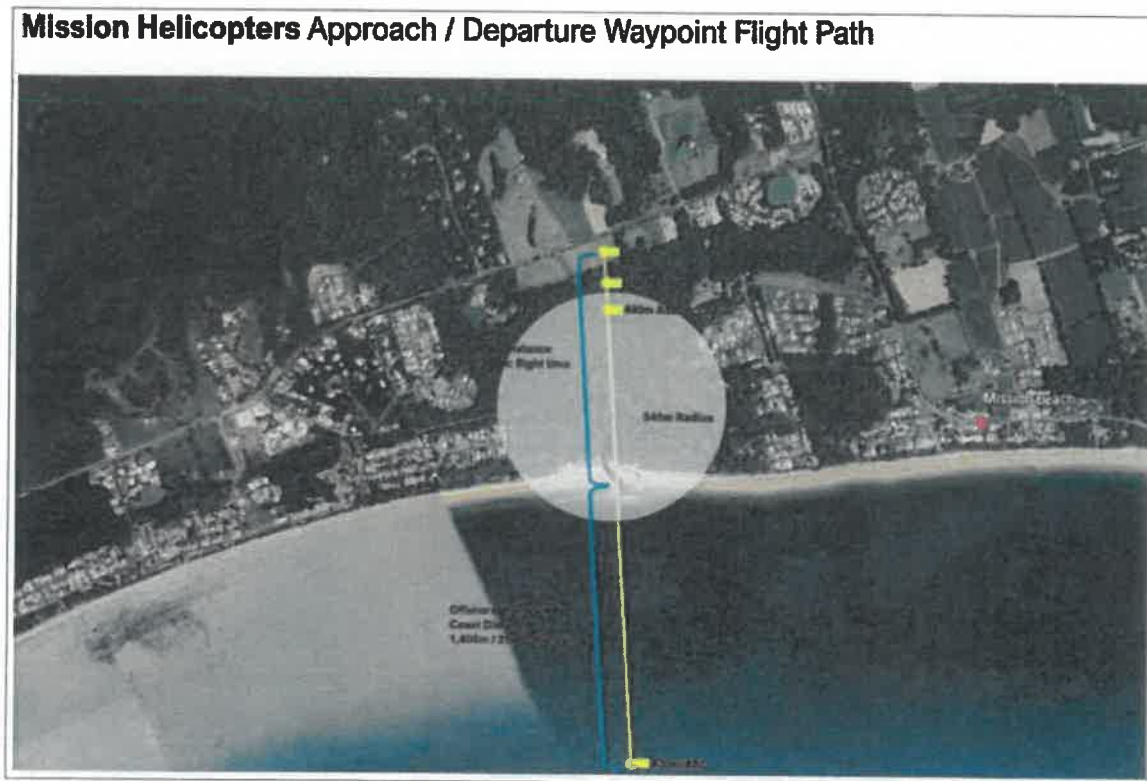
3.1 The following helicopter types have been nominated by the proponent, and which may operate from the site:

- Bell 206L LongRanger with a take-off weight of 1,800 kg (1.8 t)
- Robinson R44 with a take-off weight of 1,200 kg (1.2 t)

3.2 The landing site is to be operated as a “one way” pad, with the flight track in and out, described in Figure 2.

3.3 The proponent has advised that there may be times where the flight track is unworkable due to prevailing weather and would therefore not operate in those conditions.

Figure 2: Flight track



**4.0 NOISE LEVEL CRITERIA**

- 4.1 There is no legislation or other mandatory requirement which sets objective criteria for the assessment of noise from helicopter landing sites in Queensland.
- 4.2 The assessment levels for proposed helicopter operations at the subject site have been derived from the Victorian EPA Publication 1254.2 which specifically details objective noise level targets to be achieved from helicopter landing sites and also reference acoustic quality objectives set out in the Queensland *Environmental Protection (Noise) Policy 2019*.
- 4.3 For this assessment, noise levels associated with the proposed helicopter operations are to be considered in terms of the following noise metrics, as described in Australian Standard 2363 *Acoustics - Measurement of noise from helicopter operations (AS 2363)*:
- The A-weighted, Fast time (F) weighted, equivalent from combined movements over the proposed operating hours in a single day between proposed hours of operation 8 am to 6 pm ( $L_{AFeq,10hr}(Hel)$ );
  - The A-weighted, Fast time (F) weighted, equivalent noise level from combined movements over a single operating hour ( $L_{AFeq,1hr}(Hel)$ ); and
  - The A-weighted, Fast time (F) weighted, maximum noise level ( $L_{AFmax}(Event)$ ) from an individual movement.
- 4.4 The assessment levels are summarised in Table 2, and apply externally to the facade of the nearest noise sensitive receivers to the subject site.

**Table 2: Summary of assessment levels**

Item	dB $L_{AFeq,10hr}(Hel)$	dB $L_{AFeq,1hr}(Hel)$	dB $L_{AFmax}(Hel)$
Helicopter activity and operations	55	50	82

**5.0 NOISE MEASUREMENTS**

- 5.1 Noise measurements shall be undertaken by suitably qualified person(s), deemed to have sufficient experience in acoustics and who is eligible for membership (full member) of the Australian Acoustical Society.
- 5.2 Noise measurements shall be conducted using instrumentation that is certified to Class 1 standards (highest standard of instrumentation for field measurements) in accordance with IEC 61672-1:2013 *Electroacoustics - Sound level meters - Part 1: Specifications*. The instrumentation shall include the capability to undertake wave file recording for post processing.
- 5.3 The independent (laboratory) calibration date of the sound level measurement instrumentation must be within 2 years of the measurement period, as specified in Section 5.5 of Australian Standard AS 1055:2018 *Acoustics – Description and measurement of environmental noise (AS 1055)*.
- 5.4 Noise measurements during helicopter operations shall be conducted simultaneously at the locations shown in Figure 1, corresponding to receivers R1, R2 and R5. These have been selected to be representative of the nearest locations where helicopter operational noise levels would be greatest. Noise levels at other locations in the vicinity would therefore be similar to those measured or lower.
- 5.5 In addition, noise measurements have been requested by the appellant to be undertaken simultaneously at receiver R3.
- 5.6 The microphone shall be positioned in the vicinity of the dwelling at each of the noise measurement locations, as follows.
- At a height of 1.5 m above ground level
  - The measurements shall not occur within 3.5 m of a vertical reflecting surface
  - The measurements shall occur within 20 m of the dwelling
  - Free from extraneous noise influence
- 5.7 The sound level measurement instrumentation is to be configured to obtain the sound exposure level and maximum noise level for each discrete event (refer Section 4.0).
- 5.8 The sound level measurement equipment shall continuously monitor sound pressure levels (fast response) recorded in 0.1 s intervals for the duration of the test flights, to enable an analysis of the rise and fall associated with helicopter noise.

## **6.0 MEASUREMENT SURVEY**

- 6.1 The measurement of noise levels from helicopter operations is to be undertaken in general accordance with Australian Standard 2363 *Acoustics - Measurement of noise from helicopter operations* (AS 2363).
- 6.2 Although technically withdrawn, AS 2363 provides appropriate methods for the measurement of noise from existing or proposed helicopter operations on the surrounding community and considers the noise generated by helicopters on the ground, on approach and departure from the landing site.
- 6.3 Measurements are to be obtained for the helicopter types proposed to be used on site and under full load conditions.
- 6.4 Measurements are required for Landing and Take off.
- 6.5 For the subject one-way helipad, Landing involves the helicopter leaving cruise altitude and completing the landing procedure to hover above the helipad, conducting a pedal turn to face the departure track, then land on the ground and reduced power to flat pitch idle for 60 seconds.
- 6.6 For the subject helipad, the Take off involves bringing into a hover and departing along the flight track until reaching cruise altitude.
- 6.7 The rates of climb and descent of the helicopter operation shall be according to usual commercial helicopter practice, suited for the subject site under consideration.
- 6.8 The helicopter shall be loaded to the envisaged maximum weight that could occur for normal operations to or from the subject helipad. It is noted that the helicopter(s) will depart Tully Airport with passengers on board and fuel to the maximum all up weight (MAUW) and fly to the site for the noise testing. Given an approximate ferry time of 10 minutes, the testing will be conducted at or near MAUW as reasonably practical.
- 6.9 Each operating mode shall be measured as a discrete event, with a minimum of four (4) separate measurements of each mode designated Landing and Take off.
- 6.10 The A-weighted, Fast time (F) weighted sound exposure level ( $L_{AE}$ ) and A-weighted, Fast time (F) weighted, maximum noise level ( $L_{Amax}$ ) is to be measured for each discrete event.
- 6.11 The general test flight method for measuring the operating modes is as follows:
1. Approach on the designated flight path and bring into hover, then conduct a 180 degree pedal turn, then land on the helipad
  2. Idle for 60 seconds at flat pitch idle
  3. Take off on the designated flight path to cruise altitude to a point not less than 4 km from the helipad
  4. Conduct a gentle (teardrop) turn at cruise altitude and no closer than 4 km from the helipad.
  5. Repeat steps 1-4 a minimum three (3) more times
  6. Repeat steps 1-5 for the second helicopter type proposed to be used on site.
- 6.12 Measurement shall be undertaken under suitable weather conditions, generally considered to be:
- Wind speeds below 5 m/s at the microphone location
  - Little or no rainfall
  - Times when ambient noise influence is expected to be low.

**7.0 REPORTING**

- 7.1 A report is to be prepared that summarises the measured helicopter noise levels and compared with the assessment levels in Table 2 to confirm acceptability.
- 7.2 The report shall confirm the measurement conditions, helicopter types for which noise level measurements were obtained.
- 7.3 The  $L_{AE}$  (Event) and  $L_{Amax}$  (Event) for each Landing, Take off and Flat pitch idle shall be reported.
- 7.4 The  $L_{Amax}$  (Hel) being the logarithmic average of the  $L_{Amax}$  (Event) for each operating mode is to be determined for each helicopter type.
- 7.5 The  $L_{Amax}$  (Hel) reported levels should be compared with the assessment level in Table 2.
- 7.6 The  $L_{AE}$  (Hel) being the energy average of the  $L_{AE}$  (Event) for each operating mode is to be determined for each helicopter type.
- 7.7 The  $L_{AE}$  (Hel) reported levels will be used to confirm the allowable number of helicopter movements per day to satisfy the  $L_{Aeq,T}$  (Hel) assessment levels in Table 2.
- 7.8 The report is to be provided to the Court as part of the appeal hearing, scheduled 3 December 2021.

**APPENDIX A GLOSSARY OF TERMINOLOGY**

<b>A-weighting</b>	The process by which noise levels are corrected to account for the non-linear frequency response of the human ear.
<b>dB</b>	Decibel. The unit of sound level.
<b>Frequency</b>	The number of pressure fluctuation cycles per second of a sound wave. Measured in units of Hertz (Hz).
<b>Hertz (Hz)</b>	Hertz is the unit of frequency. One hertz is one cycle per second. One thousand hertz is a kilohertz (kHz).
<b>L<sub>A90,t</sub></b>	The A-weighted noise level equalled or exceeded for 90% of the measurement period. This is commonly referred to as the background noise level.  The suffix "t" represents the time period to which the noise level relates, e.g. (8 h) would represent a period of 8 hours, (15 min) would represent a period of 15 minutes and (2200-0700) would represent a measurement time between 10 pm and 7 am.
<b>L<sub>Aeq,T</sub></b>	The equivalent continuous (time-averaged) A-weighted sound level. This is commonly referred to as the average noise level.  The suffix "t" represents the time period to which the noise level relates, e.g. (8 h) would represent a period of 8 hours, (15 min) would represent a period of 15 minutes and (2200-0700) would represent a measurement time between 10 pm and 7 am.
<b>L<sub>Aeq,T</sub>(Hel)</b>	The totally encompassing measured or predicted sound contribution at a given receiver location over a period T, composed of sound from the helicopters relevant to the subject helipad calculated as the time average A-weighted sound pressure level.
<b>L<sub>Amax</sub></b>	The A-weighted maximum noise level. The highest noise level which occurs during the measurement period.
<b>L<sub>AFmax</sub>(Event)</b>	The maximum sound pressure level, occurring during a discrete test of a given operational mode, measured as the maximum A-weighted sound pressure levels using 'F' time-weighting
<b>L<sub>Amax</sub>(Hel)</b>	The energy (logarithmic) average of the L <sub>Amax</sub> (Event) levels for each mode of operation for each flight path
<b>L<sub>AE</sub></b>	Sound Exposure Level. The sound level of one second duration which has the same amount of energy as the actual noise event measured
<b>L<sub>AE</sub>(Event)</b>	The sound exposure level as defined in AS 1055, with a time period of t <sub>1</sub> to t <sub>2</sub> covering each mode of operation for each flight path
<b>L<sub>AE</sub>(Hel)</b>	The energy average of the L <sub>AE</sub> (Event) levels for each mode of operation for each flight path

**APPENDIX B COURT ORDER**



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In the Planning and Environment Court  
Held at: Cairns

No 34 of 2021

OAPD  
39/21

Between: **COMMUNITY FOR COASTAL AND CASSOWARY CONSERVATION INC IA13634** Appellant  
And: **CASSOWARY COAST REGIONAL COUNCIL** Respondent  
And: **MISSION HELICOPTERS PTY LTD ACN 636 565 083** Co-Respondent

**ORDER**

Before His Honour Judge Morzone QC  
Date of Hearing: 3 September 2021  
Date of Order: 3 September 2021

**IT IS ORDERED THAT:**

**Proposed helicopter flight trial**

1. On or before 7 October 2021, the acoustic experts will meet to determine the terms of reference, minimum requirements, methodology and reporting for the proposed helicopter flight trial ["agreed approach"].
2. On or before 29 October 2021, the proposed helicopter flight trial will occur pursuant to the agreed approach.
3. On or before 22 November 2021, the data obtained from the proposed helicopter flight trial will be analysed pursuant to the agreed approach and the acoustic experts will provide to the parties' solicitors a copy of their reporting pursuant to the agreed approach.

**Review**

4. The appeal will be reviewed on 3 December 2021.

**Filed on**

Filed by: Miller Bou-Samra Lawyers  
Service address: Level 1, 20-32 Lake Street Cairns QLD 4870  
Phone: 07 40301444  
Fax: 07 40301499  
Email: [reception@mbslawyers.com.au](mailto:reception@mbslawyers.com.au)

**Registrar**

ORDER  
Filed on behalf of the co-respondent



Miller Bou-Samra Lawyers  
Level 1, 20-32 Lake Street  
CAIRNS QLD 4870  
Phone: 07 40301444  
Fax: 07 40514277  
Our Ref: LBS:210047



<b>Project:</b>	P&E Appeal 34/21 - Mission Helicopters Pty Ltd v CCCC Inc & Anor	<b>Document No.:</b>	Mm 002 R01
<b>To:</b>	Planning and Environment Court C/ Miller Bou-Samra Lawyers	<b>Date:</b>	24 November 2021
<b>Attention:</b>	Ms Leeanne Bou-Samra	<b>Cross Reference:</b>	
<b>Delivery:</b>	Email	<b>Project No.:</b>	20210630 (MDA reference)
<b>From:</b>	Alex Morabito and Steven Cooper	<b>No. Pages:</b>	6 <b>Attachments:</b> Yes
<b>Subject:</b>	Noise Testing Results		

<b>Distribution:</b>			
<b>Name</b>	<b>Company</b>	<b>Information</b>	<b>Action</b>
Alex Morabito	Marshall Day Acoustics (MDA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Steven Cooper	The Acoustic Group (TAG)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Leeanne Bou-Samra	Miller Bou-Samra Lawyers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sangeetha Badya	Holding Redlitch Lawyers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ray Cronin	Mission Helicopters Pty Ltd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lachlan Deen	Marshall Day Acoustics	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**1.0 OVERVIEW**

- 1.1 The following document has been prepared by Alex Morabito (Marshall Day Acoustics [MDA]) and Steven Cooper (The Acoustic Group [TAG]) in relation to the proposed use of land at 2224 Tully-Mission Beach Road, Mission Beach (subject site) as a helicopter landing site.
- 1.2 The proposal is subject to proceedings in the Queensland Planning and Environment Court, reference no. 34 of 2021.
- 1.3 The noise testing was undertaken in accordance with the "agreed approach" in the noise testing plan, detailed in *Mm 001 R01 20210630 P&E Appeal 34\_21 - Mission Helicopters Pty Ltd v CCCC Inc & Anor - Noise Testing Plan*, dated 22 October 2021, attached in Appendix B.
- 1.4 As per the Court Order, refer Appendix B of the noise test plan, this document outlines the results of the noise testing based on a series of helicopter flight trials conducted at the subject site.
- 1.5 Acoustic terminology used throughout this document is provided in Appendix A.

## 2.0 MEASUREMENT SURVEY

- 2.1 The measurement survey and noise testing of proposed helicopter flight trials at the subject site was undertaken on Wednesday 27 October 2021, by Alex Morabito of Marshall Day Acoustics (MDA), and Matthew Dever of Noise Measurement Services (NMS) on behalf of The Acoustic Group (TAG).
- 2.2 Noise monitors were set up at the four (4) receiver locations detailed in the noise test plan (refer Table 1 below and Figure 1 in the noise test plan in Appendix B).

**Table 1: Noise monitoring locations**

Reference	Address	Relative location to proposed helicopter landing site
R1	2197 Tully-Mission Beach Road	430 m north west
R2	24 Nivosa Court	660 m north east
R3	69 Koda Street	1000 m south east
R5	2 Mission Circuit	450 m south

- 2.3 The noise measurements were conducted using instrumentation certified to Class 1 standards. The instrumentation details are provided in Table 2. The instrumentation calibration was checked in the field before and after the measurement survey, and no significant drift in sensitivity observed.

**Table 2: Noise monitoring instrumentation details**

Reference	MDA Instrumentation	NMS (TAG) instrumentation
R1	01dB DUO Smart Noise Monitor (serial no. 10197)	Larson Davis 831 (serial no. 0002578)
R2	01dB DUO Smart Noise Monitor (serial no. 10196)	Larson Davis 831 (serial no. 0002846)
R3	Measurements not obtained by MDA at this location	Larson Davis 831 (serial no. 0003300)
R5	01dB DUO Smart Noise Monitor (serial no. 10409)	Larson Davis 831 (serial no. 0002879)

- 2.4 Local weather conditions throughout the day were obtained at location R2 using an LSI weather station (serial no. 215524), configured to measure wind speed, wind direction, temperature, humidity and rain intensity in 1 second intervals.
- 2.5 Wind was light during the measurement survey, with speeds below 3 m/s at the microphone location. The temperature on the day was a warm 32 °C, with a relative humidity of 60 %.
- 2.6 The survey included measurements of noise levels from the following helicopter types, which may operate from the site:
- Bell 206L-3 LongRanger (registration no. VH-KHQ) conducted between 1130 hrs and 1200 hrs AEST
    - take-off weight of 1,882 kg from Tully Airfield (pilot, 5 passengers plus additional ‘baggage’ weight) (100 % maximum take off weight)
    - Given the fuel burn rate, the noise testing was undertaken between 97 % and 99 % maximum take off weight

- Robinson R44 II (registration no. VH-YZL) conducted between 1345 hrs and 1415 hrs AEST
    - take-off weight of 1,118 kg from South Mission Beach (pilot, 3 passengers) (99 % maximum take off weight)
    - Given the fuel burn rate, the noise testing was undertaken between 96 % and 98 % maximum take off weight
- 2.7 Four (4) separate measurements of operating mode, landing and take-off, of each helicopter type was measured as a discrete event.
- 2.8 Appendix E presents details of the tracks flown by the Bell 206L-3 LongRanger helicopter for the noise testing.
- 2.9 A review of the flight tracks for the Bell 206L-3 LongRanger indicated a take off track different to the landing flight track identified in the noise test plan. Whilst the Bell 206L-3 LongRanger did not fly the designated take off track; in terms of the noise levels, the variation in the track is unlikely to affect the assessment outcome presented herein.
- 2.10 The measured sound exposure noise levels from each helicopter type and respective operating mode, determined in accordance with the noise test plan are summarised in Table 3 and Table 4.
- 2.11 The MDA and NMS (TAG) results have been determined by post processing the raw logged (100 ms) data.

**Table 3: Measured noise levels  $L_{Ae}$  (Hel) - MDA**

Reference	Bell 206L-3 LongRanger			Robinson R44 II		
	Landing	Take-off	Flat pitch idle	Landing	Take-off	Flat pitch idle
R1	79	77	75	75	75	72
R2	71	70	61	66	68	60
R5	75	72	71	71	73	69

**Table 4: Measured noise levels  $L_{Ae}$  (Hel) – NMS (TAG)**

Reference	Bell 206L-3 LongRanger			Robinson R44 II		
	Landing	Take-off	Flat pitch idle	Landing	Take-off	Flat pitch idle
R1	79	78	70	75	75	67
R2	71	71	NA	66	69	NA
R3	74	73	NA	70	74	NA
R5	75	72	NA	71	74	NA

- 2.12 It is noted that the Flat Pitch Idle could not be measured by TAG at R2, R3 & R4 (being masked by ambient noise). The  $L_{Ae}$  presented in the above tables for MDA data include an element of ambient noise.

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2.13 The measured maximum noise levels from each helicopter type and respective operating mode, determined in accordance with the noise test plan, are summarised in Table 5 and Table 6.

**Table 5: Measured noise levels  $L_{AFmax}$  (Hel) - MDA**

Reference	Bell 206L-3 LongRanger			Robinson R44 II		
	Landing	Take-off	Flat pitch idle	Landing	Take-off	Flat pitch idle
R1	70	68	58	66	67	54
R2	63	64	45	57	59	46
R5	67	65	56	62	64	55

**Table 6: Measured noise levels  $L_{AFmax}$  (Hel) – NMS (TAG)**

Reference	Bell 206L-3 LongRanger			Robinson R44 II		
	Landing	Take-off	Flat pitch idle	Landing	Take-off	Flat pitch idle
R1	71	68	58	67	67	54
R2	64	65	NA	57	59	NA
R3	65	65	NA	63	64	NA
R5	68	65	NA	62	65	NA

2.14 The measured  $L_{AFmax}$  (Hel) levels in Table 5 and Table 6 are below the nominated maximum level limit, 82 dB  $L_{AFmax}$ .

2.15 Further details, including the  $L_{AE}$  (Event) and  $L_{AFmax}$  (Event) for each landing, take off and flat pitch idle are provided in Appendix C and Appendix D.

### 3.0 ASSESSMENT OF NOISE LEVELS

3.1 The relevant assessment levels detailed in the noise test plan and summarised in Table 7.

**Table 7: Summary of assessment levels (external the facade of the nearest noise sensitive receivers)**

Item	dB $L_{A_{\text{Freq},10\text{hr}}}$ (Hel)	dB $L_{A_{\text{Freq},1\text{hr}}}$ (Hel)	dB $L_{A_{\text{Fmax}}}$ (Hel)
Helicopter activity and operations	55	50	82

- 3.2 The maximum measured noise levels in Table 5 and Table 6 from both helicopter types and respective operating modes were well below the relevant assessment level, 82 dB  $L_{A_{\text{Fmax}}}$ .
- 3.3 The results of the testing show that R1 to have the highest measured helicopter noise levels from the landing and take-off operations. Therefore, the maximum allowable number of helicopter movements per day is controlled by compliance at R1 with the  $L_{A_{\text{Freq},T}}$  (Hel) assessment levels in Table 7.
- 3.4 The allowable number of helicopter movements that satisfy the  $L_{A_{\text{Freq},T}}$  (Hel) assessment levels have been calculated from the  $L_{A_E}$  (Hel) measurement data in Table 3 and Table 4, including 120 seconds of flat pitch idle per movement
- 3.5 The proponent had previously sought approval for up to twenty (20) helicopter movements on any single day (8 am – 6 pm), comprising ten (10) landings and ten (10) take-offs, including 120 seconds of flat pitch idle per movement. The calculated  $L_{A_{\text{Freq},T}}$  (Hel) based on this number of movements and the measured noise levels by each consultant for each helicopter type is summarised in Table 8.

**Table 8: Calculated  $L_{A_{\text{Freq},10\text{hr}}}$  – 10 landings and 10 take-offs in any given day**

Reference	Bell 206L-3 LongRanger		Robinson R44 II	
	MDA	NMS (TAG)	MDA	NMS (TAG)
R1	47	47	44	44
R2	38	39	35	35
R3	Not measured	41	Not measured	40
R5	43	41	41	40

- 3.6 The calculated noise levels in Table 8 readily achieve the relevant assessment level, 55 dB  $L_{A_{\text{Freq},10\text{hr}}}$  for either helicopter type. Note, if a combination of the helicopter types made up the total number of movements per proposed day, then the calculated noise levels would be between the lower and upper bounds of the noise levels presented in Table 8, and therefore would still readily meet the relevant assessment level.
- 3.7 The results in Table 8 identify that location R1 is the critical receiver location with respect to the  $L_{A_{\text{Freq},T}}$  (Hel) assessment.
- 3.8 In addition, the highest allowable number of helicopter movements have been determined to satisfy the  $L_{A_{\text{Freq},T}}$  (Hel) assessment levels.

- 3.9 Using the measured noise level for either helicopter type, the maximum number of helicopter movements that satisfy the  $L_{FAeq,T}$  (Hel) assessment levels in Table 7 are as follows:
- Bell 206L-3 LongRanger
    - Forty (40) helicopter movements on any single day (8 am – 6 pm), comprising twenty (20) landings, twenty (20) take-offs and 120 seconds of flat pitch idle per movement.
    - Three (3) helicopter movements in any given 1 hour period, comprising two (2) landings and one (1), or one (1) landing and 2 take-offs.
  - Robinson R44 II
    - 80 helicopter movements on any single day (8 am – 6 pm), comprising forty (40) landings, forty (40) take-offs and 120 seconds of flat pitch idle per movement.
    - Eight (8) helicopter movements in any given 1 hour period, comprising four (4) landings and four (4) take-offs.

**APPENDIX A GLOSSARY OF TERMINOLOGY**

<b>A-weighting</b>	The process by which noise levels are corrected to account for the non-linear frequency response of the human ear.
<b>dB</b>	Decibel. The unit of sound level.
<b><math>L_{Aeq,T}</math> (Hel)</b>	The totally encompassing measured or predicted sound contribution at a given receiver location over a period T, composed of sound from the helicopters relevant to the subject helipad calculated as the time average A-weighted sound pressure level.  The suffix "T" represents the time period to which the noise level relates, e.g. (10 hr) would represent a period of 10 hours, (15 min) would represent a period of 15 minutes and (2200-0700) would represent a measurement time between 10 pm and 7 am.
<b><math>L_{AFmax}</math> (Event)</b>	The A-weighted maximum sound pressure level, occurring during a discrete test of a given operational mode, measured as the maximum A-weighted sound pressure levels using 'F' time-weighting
<b><math>L_{Amax}</math> (Hel)</b>	The energy (logarithmic) average of the $L_{AFmax}$ (Event) levels for each mode of operation for each flight path
<b><math>L_{AE}</math></b>	Sound Exposure Level. The sound level of one second duration which has the same amount of energy as the actual noise event measured
<b><math>L_{AE}</math> (Event)</b>	The sound exposure level as defined in AS 1055, with a time period of $t_1$ to $t_2$ covering each mode of operation for each flight path
<b><math>L_{AE}</math> (Hel)</b>	The energy average of the $L_{AE}$ (Event) levels for each mode of operation for each flight path





**APPENDIX B NOISE TEST PLAN**



<b>Project:</b>	P&E Appeal 34/21 - Mission Helicopters Pty Ltd v CCCC Inc & Anor	<b>Document No.:</b>	Mm 001 R01		
<b>To:</b>	Planning and Environment Court C/ Miller Bou-Samra Lawyers	<b>Date:</b>	22 October 2021		
<b>Attention:</b>	Ms Leeanne Bou-Samra	<b>Cross Reference:</b>			
<b>Delivery:</b>	Email	<b>Project No.:</b>	20210630 (MDA reference)		
<b>From:</b>	Alex Morabito and Steven Cooper	<b>No. Pages:</b>	9	<b>Attachments:</b>	Yes
<b>Subject:</b>	Noise Testing Plan				

**Distribution:**

Name	Company	Information	Action
Alex Morabito	Marshall Day Acoustics	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Steven Cooper	The Acoustic Group	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Leeanne Bou-Samra	Miller Bou-Samra Lawyers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sangeetha Badya	Holding Redlitch Lawyers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ray Cronin	Mission Helicopters Pty Ltd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lachlan Deen	Marshall Day Acoustics	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- 1.0 OVERVIEW**
- 1.1 The following document has been prepared by Alex Morabito (Marshall Day Acoustics) and Steven Cooper (The Acoustic Group) in relation to the proposed use of land at 2224 Tully-Mission Beach Road, Mission Beach (subject site), as a helicopter landing site.
  - 1.2 The proposal is subject to proceedings in the Queensland Planning and Environment Court, reference No 34 of 2021.
  - 1.3 As per the Court Order, refer Appendix B, this document outlines the “agreed approach,” including the terms of reference, noise level requirements, methodology and reporting for the noise testing associated with the proposed helicopter flight trial at the subject site.
  - 1.4 Acoustic terminology used throughout this document is provided in Appendix A.

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**2.0 SUBJECT SITE**

- 2.1 Mission Helicopters Pty Ltd (the proponent) has proposed to use land at 2224 Tully-Mission Beach Road, Mission Beach, as a helicopter landing site (commonly referred to as a “helipad”).
- 2.2 The nearest noise sensitive receivers in the vicinity of the site are detailed in Table 1 and shown in Figure 1.

Table 1: Noise sensitive receivers

Reference	Address	Relative location to proposed helicopter landing site
R1	2237 Tully-Mission Beach Road	430 m north west
R2	24 Nivosa Court	660 m north east
R3	69 Koda Street	1000 m south east
R4	2116 Tully-Mission Beach Road	500 m south
R5	2 Mission Circuit	450 m south
R6	2117 Tully-Mission Beach Road	510 m south west

Note: **bold** indicate locations where measurements to be undertaken

Figure 1: Site location and surrounds



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**3.0 PROPOSED USE**

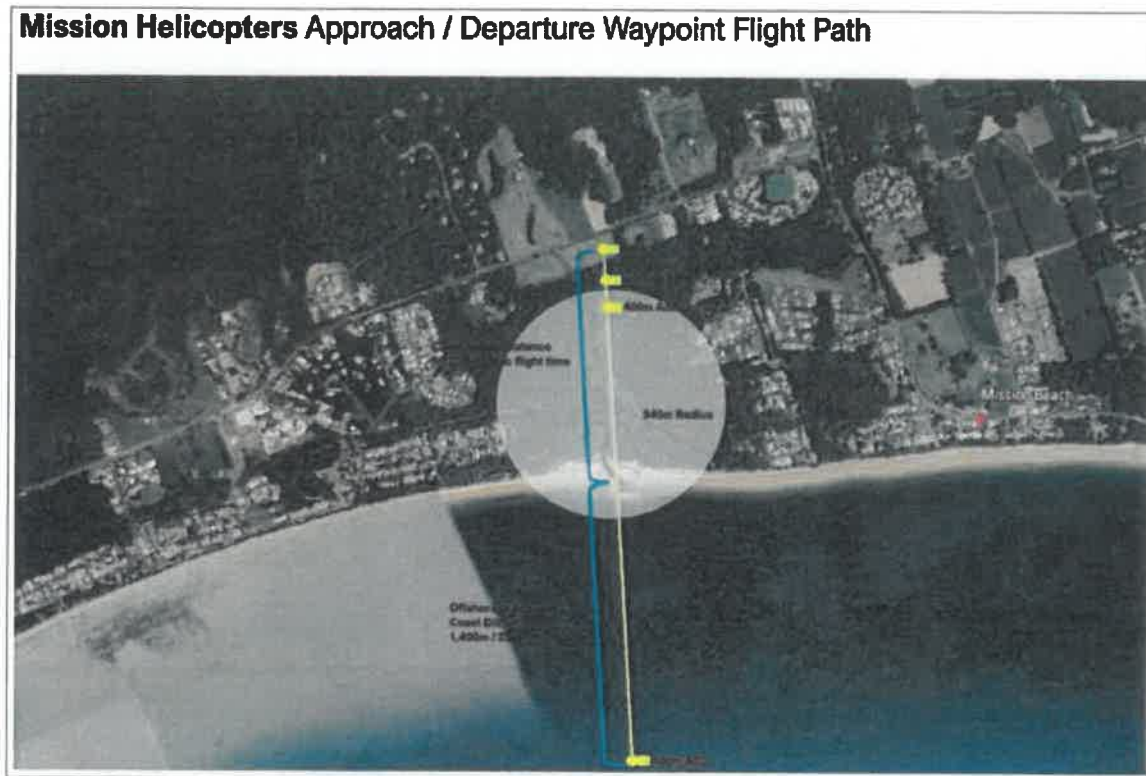
3.1 The following helicopter types have been nominated by the proponent, and which may operate from the site:

- Bell 206L LongRanger with a take-off weight of 1,800 kg (1.8 t)
- Robinson R44 with a take-off weight of 1,200 kg (1.2 t)

3.2 The landing site is to be operated as a “one way” pad, with the flight track in and out, described in Figure 2.

3.3 The proponent has advised that there may be times where the flight track is unworkable due to prevailing weather and would therefore not operate in those conditions.

Figure 2: Flight track



**4.0 NOISE LEVEL CRITERIA**

- 4.1 There is no legislation or other mandatory requirement which sets objective criteria for the assessment of noise from helicopter landing sites in Queensland.
- 4.2 The assessment levels for proposed helicopter operations at the subject site have been derived from the Victorian EPA Publication 1254.2 which specifically details objective noise level targets to be achieved from helicopter landing sites and also reference acoustic quality objectives set out in the Queensland *Environmental Protection (Noise) Policy 2019*.
- 4.3 For this assessment, noise levels associated with the proposed helicopter operations are to be considered in terms of the following noise metrics, as described in Australian Standard 2363 *Acoustics - Measurement of noise from helicopter operations (AS 2363)*:
- The A-weighted, Fast time (F) weighted, equivalent from combined movements over the proposed operating hours in a single day between proposed hours of operation 8 am to 6 pm ( $L_{AFeq,10hr} (Hel)$ );
  - The A-weighted, Fast time (F) weighted, equivalent noise level from combined movements over a single operating hour ( $L_{AFeq,1hr} (Hel)$ ); and
  - The A-weighted, Fast time (F) weighted, maximum noise level ( $L_{AFmax} (Event)$ ) from an individual movement.
- 4.4 The assessment levels are summarised in Table 2, and apply externally to the facade of the nearest noise sensitive receivers to the subject site.

**Table 2: Summary of assessment levels**

Item	dB $L_{AFeq,10hr} (Hel)$	dB $L_{AFeq,1hr} (Hel)$	dB $L_{AFmax} (Hel)$
Helicopter activity and operations	55	50	82

51

**5.0 NOISE MEASUREMENTS**

- 5.1 Noise measurements shall be undertaken by suitably qualified person(s), deemed to have sufficient experience in acoustics and who is eligible for membership (full member) of the Australian Acoustical Society.
- 5.2 Noise measurements shall be conducted using instrumentation that is certified to Class 1 standards (highest standard of instrumentation for field measurements) in accordance with IEC 61672-1:2013 *Electroacoustics - Sound level meters - Part 1: Specifications*. The instrumentation shall include the capability to undertake wave file recording for post processing.
- 5.3 The independent (laboratory) calibration date of the sound level measurement instrumentation must be within 2 years of the measurement period, as specified in Section 5.5 of Australian Standard AS 1055:2018 *Acoustics – Description and measurement of environmental noise* (AS 1055).
- 5.4 Noise measurements during helicopter operations shall be conducted simultaneously at the locations shown in Figure 1, corresponding to receivers R1, R2 and R5. These have been selected to be representative of the nearest locations where helicopter operational noise levels would be greatest. Noise levels at other locations in the vicinity would therefore be similar to those measured or lower.
- 5.5 In addition, noise measurements have been requested by the appellant to be undertaken simultaneously at receiver R3.
- 5.6 The microphone shall be positioned in the vicinity of the dwelling at each of the noise measurement locations, as follows.
- At a height of 1.5 m above ground level
  - The measurements shall not occur within 3.5 m of a vertical reflecting surface
  - The measurements shall occur within 20 m of the dwelling
  - Free from extraneous noise influence
- 5.7 The sound level measurement instrumentation is to be configured to obtain the sound exposure level and maximum noise level for each discrete event (refer Section 4.0).
- 5.8 The sound level measurement equipment shall continuously monitor sound pressure levels (fast response) recorded in 0.1 s intervals for the duration of the test flights, to enable an analysis of the rise and fall associated with helicopter noise.

## 6.0 MEASUREMENT SURVEY

- 6.1 The measurement of noise levels from helicopter operations is to be undertaken in general accordance with Australian Standard 2363 *Acoustics - Measurement of noise from helicopter operations* (AS 2363).
- 6.2 Although technically withdrawn, AS 2363 provides appropriate methods for the measurement of noise from existing or proposed helicopter operations on the surrounding community and considers the noise generated by helicopters on the ground, on approach and departure from the landing site.
- 6.3 Measurements are to be obtained for the helicopter types proposed to be used on site and under full load conditions.
- 6.4 Measurements are required for Landing and Take off.
- 6.5 For the subject one-way helipad, Landing involves the helicopter leaving cruise altitude and completing the landing procedure to hover above the helipad, conducting a pedal turn to face the departure track, then land on the ground and reduced power to flat pitch idle for 60 seconds.
- 6.6 For the subject helipad, the Take off involves bringing into a hover and departing along the flight track until reaching cruise altitude.
- 6.7 The rates of climb and descent of the helicopter operation shall be according to usual commercial helicopter practice, suited for the subject site under consideration.
- 6.8 The helicopter shall be loaded to the envisaged maximum weight that could occur for normal operations to or from the subject helipad. It is noted that the helicopter(s) will depart Tully Airport with passengers on board and fuel to the maximum all up weight (MAUW) and fly to the site for the noise testing. Given an approximate ferry time of 10 minutes, the testing will be conducted at or near MAUW as reasonably practical.
- 6.9 Each operating mode shall be measured as a discrete event, with a minimum of four (4) separate measurements of each mode designated Landing and Take off.
- 6.10 The A-weighted, Fast time (F) weighted sound exposure level ( $L_{AE}$ ) and A-weighted, Fast time (F) weighted, maximum noise level ( $L_{Amax}$ ) is to be measured for each discrete event.
- 6.11 The general test flight method for measuring the operating modes is as follows:
1. Approach on the designated flight path and bring into hover, then conduct a 180 degree pedal turn, then land on the helipad
  2. Idle for 60 seconds at flat pitch idle
  3. Take off on the designated flight path to cruise altitude to a point not less than 4 km from the helipad
  4. Conduct a gentle (teardrop) turn at cruise altitude and no closer than 4 km from the helipad.
  5. Repeat steps 1-4 a minimum three (3) more times
  6. Repeat steps 1-5 for the second helicopter type proposed to be used on site.
- 6.12 Measurement shall be undertaken under suitable weather conditions, generally considered to be:
- Wind speeds below 5 m/s at the microphone location
  - Little or no rainfall
  - Times when ambient noise influence is expected to be low.

**7.0 REPORTING**

- 7.1 A report is to be prepared that summarises the measured helicopter noise levels and compared with the assessment levels in Table 2 to confirm acceptability.
- 7.2 The report shall confirm the measurement conditions, helicopter types for which noise level measurements were obtained.
- 7.3 The  $L_{AE}$  (Event) and  $L_{Amax}$  (Event) for each Landing, Take off and Flat pitch idle shall be reported.
- 7.4 The  $L_{Amax}$  (Hel) being the logarithmic average of the  $L_{Amax}$  (Event) for each operating mode is to be determined for each helicopter type.
- 7.5 The  $L_{Amax}$  (Hel) reported levels should be compared with the assessment level in Table 2.
- 7.6 The  $L_{AE}$  (Hel) being the energy average of the  $L_{AE}$  (Event) for each operating mode is to be determined for each helicopter type.
- 7.7 The  $L_{AE}$  (Hel) reported levels will be used to confirm the allowable number of helicopter movements per day to satisfy the  $L_{Aeq,T}$  (Hel) assessment levels in Table 2.
- 7.8 The report is to be provided to the Court as part of the appeal hearing, scheduled 3 December 2021.



**APPENDIX A GLOSSARY OF TERMINOLOGY**

<b>A-weighting</b>	The process by which noise levels are corrected to account for the non-linear frequency response of the human ear.
<b>dB</b>	Decibel. The unit of sound level.
<b>Frequency</b>	The number of pressure fluctuation cycles per second of a sound wave. Measured in units of Hertz (Hz).
<b>Hertz (Hz)</b>	Hertz is the unit of frequency. One hertz is one cycle per second. One thousand hertz is a kilohertz (kHz).
<b>L<sub>A90</sub>(t)</b>	The A-weighted noise level equalled or exceeded for 90% of the measurement period. This is commonly referred to as the background noise level.  The suffix "t" represents the time period to which the noise level relates, e.g. (8 h) would represent a period of 8 hours, (15 min) would represent a period of 15 minutes and (2200-0700) would represent a measurement time between 10 pm and 7 am.
<b>L<sub>Aeq,T</sub></b>	The equivalent continuous (time-averaged) A-weighted sound level. This is commonly referred to as the average noise level.  The suffix "t" represents the time period to which the noise level relates, e.g. (8 h) would represent a period of 8 hours, (15 min) would represent a period of 15 minutes and (2200-0700) would represent a measurement time between 10 pm and 7 am.
<b>L<sub>Aeq,T</sub>(Hel)</b>	The totally encompassing measured or predicted sound contribution at a given receiver location over a period T, composed of sound from the helicopters relevant to the subject helipad calculated as the time average A-weighted sound pressure level.
<b>L<sub>Amax</sub></b>	The A-weighted maximum noise level. The highest noise level which occurs during the measurement period.
<b>L<sub>Afmax</sub>(Event)</b>	The maximum sound pressure level, occurring during a discrete test of a given operational mode, measured as the maximum A-weighted sound pressure levels using 'F' time-weighting
<b>L<sub>Amax</sub>(Hel)</b>	The energy (logarithmic) average of the L <sub>Amax</sub> (Event) levels for each mode of operation for each flight path
<b>L<sub>AE</sub></b>	Sound Exposure Level. The sound level of one second duration which has the same amount of energy as the actual noise event measured
<b>L<sub>AE</sub>(Event)</b>	The sound exposure level as defined in AS 1055, with a time period of t <sub>1</sub> to t <sub>2</sub> covering each mode of operation for each flight path
<b>L<sub>AE</sub>(Hel)</b>	The energy average of the L <sub>AE</sub> (Event) levels for each mode of operation for each flight path

APPENDIX B COURT ORDER

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In the Planning and Environment Court  
Held at: Cairns

No 34 of 2021

OAD  
39/21

Between: **COMMUNITY FOR COASTAL AND CASSOWARY CONSERVATION INC IA13634** Appellant  
And: **CASSOWARY COAST REGIONAL COUNCIL** Respondent  
And: **MISSION HELICOPTERS PTY LTD ACN 636 565 083** Co-Respondent

**ORDER**

Before His Honour Judge Morzone QC  
Date of Hearing: 3 September 2021  
Date of Order: 3 September 2021

**IT IS ORDERED THAT:**

**Proposed helicopter flight trial**

1. On or before 7 October 2021, the acoustic experts will meet to determine the terms of reference, minimum requirements, methodology and reporting for the proposed helicopter flight trial ["agreed approach"].
2. On or before 29 October 2021, the proposed helicopter flight trial will occur pursuant to the agreed approach.
3. On or before 22 November 2021, the data obtained from the proposed helicopter flight trial will be analysed pursuant to the agreed approach and the acoustic experts will provide to the parties' solicitors a copy of their reporting pursuant to the agreed approach.

**Review**

4. The appeal will be reviewed on 3 December 2021.

**Filed on**

Filed by: Miller Bou-Samra Lawyers  
Service address: Level 1, 20-32 Lake Street Cairns QLD 4870  
Phone: 07 40301444  
Fax: 07 40301499  
Email: [reception@mbslawyers.com.au](mailto:reception@mbslawyers.com.au)

Registrar

ORDER  
Filed on behalf of the co-respondent



Miller Bou-Samra Lawyers  
Level 1, 20-32 Lake Street  
CAIRNS QLD 4870  
Phone: 07 40301444  
Fax: 07 40514277  
Our Ref: LBS:210047



**APPENDIX C NOISE MEASUREMENT SUMMARY - MDA**

**C1 Bell 206L-3 LongRanger**

<b>R1</b>	<b>dB LAE (Event)</b>	<b>dB LAmax (Event)</b>
Landing 1	79.1	71.7
Landing 2	77.9	67.8
Landing 3	78.6	69.5
Landing 4	78.7	70.2
Energy (logarithmic) average	78.6	70.0
Takeoff 1	76.0	68.9
Takeoff 2	79.0	70.1
Takeoff 3	75.7	64.7
Takeoff 4	78.1	68.1
Energy (logarithmic) average	77.4	68.4
Flat pitch idle 1	72.7	56.1
Flat pitch idle 2	75.7	58.4
Flat pitch idle 3	76.7	59.6
Flat pitch idle 4	75.3	57.8
Energy (logarithmic) average	75.3	58.2
<b>R2</b>	<b>dB LAE (Event)</b>	<b>dB LAmax (Event)</b>
Landing 1	70.9	62.3
Landing 2	70.6	60.3
Landing 3	70.5	65.3
Landing 4	71.4	61.8
Energy (logarithmic) average	70.9	62.8
Takeoff 1	69.3	63.7
Takeoff 2	68.7	64.1
Takeoff 3	72.1	65.8
Takeoff 4	70.2	62.6
Energy (logarithmic) average	70.3	64.2
Flat pitch idle 1	60.2	47.3
Flat pitch idle 2	61.3	35.4
Flat pitch idle 3	61.8	46.9
Flat pitch idle 4	59.5	44.9
Energy (logarithmic) average	60.8	45.3

R5	dB L <sub>Ae</sub> (Event)	dB L <sub>Amax</sub> (Event)
Landing 1	75.8	69.9
Landing 2	74.7	67.7
Landing 3	74.8	65.0
Landing 4	74.8	64.2
<b>Energy (logarithmic) average</b>	<b>75.1</b>	<b>67.3</b>
Takeoff 1	72.1	66.5
Takeoff 2	72.8	63.1
Takeoff 3	71.0	61.6
Takeoff 4	71.7	66.3
<b>Energy (logarithmic) average</b>	<b>71.9</b>	<b>64.9</b>
Flat pitch idle 1	70.3	54.0
Flat pitch idle 2	70.5	53.4
Flat pitch idle 3	71.5	54.4
Flat pitch idle 4	70.7	59.1
<b>Energy (logarithmic) average</b>	<b>70.8</b>	<b>55.9</b>

**C2 Robinson R44 II**

R1	dB L <sub>Ae</sub> (Event)	dB L <sub>Amax</sub> (Event)
Landing 1	72.6	67.3
Landing 2	75.1	65.4
Landing 3	74.4	63.3
Landing 4	76.4	66.9
<b>Energy (logarithmic) average</b>	<b>74.8</b>	<b>66.0</b>
Takeoff 1	74.9	66.6
Takeoff 2	75.4	66.3
Takeoff 3	74.8	68.2
Takeoff 4	72.7	65.3
<b>Energy (logarithmic) average</b>	<b>74.6</b>	<b>66.7</b>
Flat pitch idle 1	69.1	52.0
Flat pitch idle 2	73.7	55.1
Flat pitch idle 3	72.3	53.4
Flat pitch idle 4	70.3	53.0
<b>Energy (logarithmic) average</b>	<b>71.7</b>	<b>53.5</b>

<b>R2</b>	<b>dB LAE (Event)</b>	<b>dB LAmax (Event)</b>
Landing 1	66.1	56.3
Landing 2	64.4	57.4
Landing 3	65.3	57.0
Landing 4	66.4	56.3
<b>Energy (logarithmic) average</b>	<b>65.6</b>	<b>56.8</b>
Takeoff 1	68.5	59.3
Takeoff 2	68.1	59.6
Takeoff 3	67.8	57.6
Takeoff 4	68.1	57.5
<b>Energy (logarithmic) average</b>	<b>68.1</b>	<b>58.6</b>
Flat pitch idle 1	55.4	44.8
Flat pitch idle 2	56.7	43.5
Flat pitch idle 3	61.9	45.7
Flat pitch idle 4	61.9	48.7
<b>Energy (logarithmic) average</b>	<b>59.9</b>	<b>46.1</b>

<b>R5</b>	<b>dB LAE (Event)</b>	<b>dB LAmax (Event)</b>
Landing 1	70.9	61.1
Landing 2	71.1	63.0
Landing 3	70.1	61.5
Landing 4	71.0	63.1
<b>Energy (logarithmic) average</b>	<b>70.8</b>	<b>62.3</b>
Takeoff 1	73.1	65.6
Takeoff 2	72.4	63.5
Takeoff 3	71.7	63.8
Takeoff 4	74.7	64.3
<b>Energy (logarithmic) average</b>	<b>73.1</b>	<b>64.4</b>
Flat pitch idle 1	67.9	51.3
Flat pitch idle 2	70.8	58.6
Flat pitch idle 3	67.0	51.6
Flat pitch idle 4	68.9	54.3
<b>Energy (logarithmic) average</b>	<b>68.9</b>	<b>55.0</b>

**APPENDIX D NOISE MEASUREMENT SUMMARY – NMS (TAG)**

**D1 Bell 206L-3 LongRanger**

**Test 1: Bell LongRanger (LAE)**

Movement	Landing Site	R1	R2	R3	R5
<b>Landing</b>					
1	94.7	79.4	71.6	74.0	76.5
2	95.1	77.5	70.9	73.8	74.1
3	94.7	79.1	71.5	75.2	75.1
4	95.0	78.7	71.5	74.3	74.8
Log. Average	94.9	78.7	71.4	74.4	75.2
<b>Flat Pitch Idle ##</b>					
1	79.0	67.5	NA	NA	NA
2	76.2**	70.8	NA	NA	NA
3	82.6	69.9	NA	NA	NA
4	79.3**	72.0	NA	NA	NA
Log. Average	79.9	70.3	NA	NA	NA
1	89.5	76.4	69.9	74.2	73.0
2	88.7	79.3	69.6	*	72.4
3	92.2	76.1	72.6	72.4	71.4
4	88.8	78.5	71.1	73.4	72.7
Log. Average	90.1	77.8	71.0	73.4	72.4

## less than 60 seconds

\* Measurement affected by birds

\*\* Extraneous noise of passing vehicles excluded from measurement



**Test 1: Bell LongRanger (LAF, MAX)**

Movement	Landing Site	R1	R2	R3	R5
<b>Landing</b>					
1	86.7	72.5	63.0	63.0	70.3
2	88.7	68.1	60.9	66.0	67.9
3	87.1	70.9	66.4	64.6	65.1
4	88.2	70.5	62.4	63.9	64.7
Log. Average	87.7	70.8	63.7	64.5	67.6
<b>Take-off</b>					
1	83.2	68.8	65.4	66.6	66.5
2	78.6	70.4	64.8	*	64.4
3	83.6	64.5	65.3	62.9	61.8
4	79.2	68.0	63.7	64.1	66.8
Log. Average	81.7	68.4	64.9	64.8	65.3

\* Measurement affected by birds



**D2 Robinson R44 II**

**Test 2: Robinson R44 (LAE)**

Movement	Landing Site	R1	R2	R3	R5
<b>Landing</b>					
1	91.7	72.4	66.3	68.6	71.3
2	93.5	75.1	65.1	70.7	71.5
3	91.9	73.7	65.8	71.2	70.4
4	94.8	76.9	66.5	*	72.3
Log. Average	93.2	74.8	66.0	70.3	71.4
<b>Flat Pitch Idle ##</b>					
1	78.5**	66.1	NA	NA	NA
2	76.4**	68.7	NA	NA	NA
3	81.5	67.5	NA	NA	NA
4	77.5**	65.2	NA	NA	NA
Log. Average	78.9	67.1	NA	NA	NA
<b>Take-off</b>					
1	87.4	75.2	69.1	73.6	73.4
2	88.1	74.8	68.5	74.3	72.8
3	89.4	75.1	68.5	75.0	72.3
4	87.8	73.0	68.6	74.4	75.0
Log. Average	88.2	74.6	68.7	74.4	73.5

## less than 60 seconds

\* Measurement affected by birds

\*\* Extraneous noise of passing vehicles excluded from measurement

**Test 2: Robinson R44 (LAF, MAX)**

Movement	Landing Site	R1	R2	R3	R5
<b>Landing</b>					
1	85.5	67.7	56.9	59.3	60.8
2	85.2	65.9	58.0	63.3	63.1
3	84.6	63.0	57.5	64.5	61.8
4	88.0	68.0	57.1	*	63.2
Log. Average	86.0	66.6	57.4	62.9	62.3
<b>Take-off</b>					
1	78.9	67.1	60.7	63.4	65.7
2	78.8	66.2	60.3	63.3	64.5
3	80.4	67.8	58.1	64.5	63.2
4	76.5	66.0	58.0	64.6	64.5
Log. Average	78.9	66.8	59.4	64.0	64.6

\* Measurement affected by birds

APPENDIX E BELL 206L-3 LONGRANGER FLIGHT TRACKS



Annexure A



0 30 60 90 120  
Meters

**4 elements**  
CONSULTING

Client: Gilvear Planning  
Project Manager: R. Hughes  
Date compiled: 18.02.2022  
Compiler: J. Coase

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**Legend**

- Lot 3 RP732964
- Area to be revegetated (≈0.69ha)
- Existing native vegetation (≈0.91ha)
- 1st Order stream
- 2nd Order stream
- Existing wildlife proof fence
- Proposed wildlife proof fence

GDA2020  
4E 00271

66

# Attachment A.1

Our ref TMR20-029620 (500-724)  
Your ref J000975:MSI:KLG  
Enquiries Ronald Kaden



Department of  
Transport and Main Roads

3 April 2020

## Decision Notice – Permitted Road Access Location (s62(1) Transport Infrastructure Act 1994)

This is not an authorisation to commence work on a state-controlled road<sup>1</sup>

Development application reference number MCU20/0006, lodged with Cassowary Coast Regional Council involves constructing or changing a vehicular access between Lot 3RP732964, the land the subject of the application, and Tully - Mission Beach Road (a state-controlled road).

In accordance with section 62A(2) of the *Transport Infrastructure Act 1994* (TIA), this development application is also taken to be an application for a decision under section 62(1) of TIA.

### Applicant Details

Name and address Mission Helicopters Pty Ltd  
C/- Gilvear Planning Pty Ltd  
PO Box 228  
Babinda QLD 4861

### Application Details

Address of Property 2224 Tully-Mission Beach Road, Mission Beach QLD 4852  
Real Property Description 3RP732964  
Aspect/s of Development Development Permit for Material Change of Use for Air Services (Aviation Facility)

### Decision (given under section 67 of TIA)

It has been decided to approve the application, subject to the following conditions:

No.	Conditions of Approval	Condition Timing
1	<b>Lot 3RP732964 Northern Portion (existing)</b> The permitted road access location is approximately 90 metres from the northern boundary of lot 3RP732964, in accordance with: a) TMR Layout Plan (8202 - 22.22km) Issue A 02/04/2020, and b) Site Distance Assessment prepared by Trinity Engineering and Consulting dated 18 February 2020 reference Sketch 1376-01 Rev B	At all times.
2	<b>Lot 3RP732964 Southern Portion</b> The permitted road access location is approximately 480 metres	At all times.

<sup>1</sup> Please refer to the further approvals required under the heading 'Further approvals'

Program Delivery and Operations Branch  
Far North Region, Cairns Corporate Tower, 15 Lake Street Cairns Queensland 4870  
PO Box 6185 Cairns Queensland 4870  
Document Set ID: 2793949  
Version: 1, Version Date: 09/04/2020

Telephone (07) 4045 7151  
Website [www.tmr.qld.gov.au](http://www.tmr.qld.gov.au)  
ABN: 39 407 690 291

No.	Conditions of Approval	Condition Timing
	from the southern boundary of lot 3RP732964, in accordance with: a) TMR Layout Plan (8202 - 22.22km) Issue A 02/04/2020, and b) Site Distance Assessment prepared by Trinity Engineering and Consulting dated 18 February 2020 reference Sketch 1376-01 Rev B	
3	Direct access is prohibited between Tully - Mission Beach Road and Lot 3RP732964 at any location other than the permitted road access locations described in Conditions 1 and 2.	At all times.
4	The use of the permitted road access locations is to be restricted to: a) Design vehicles up to a maximum size Six Axle (or more) Articulated Vehicle - Class 9 Long (up to 19.0m) Heavy Vehicle**	At all times.
	Note: ** as described in Austroads Vehicle Classification System	
5	Road Access Works at Lot 3RP732964 Southern Portion's Permitted Road Access Location must be designed and constructed in accordance with Austroads Guide to Road Design, a) Part 4: Intersections and Crossing - General, Figure A 28 Basic right (BAR) turn treatment on a two-lane rural road, and b) Part 4A: Unsignalised and Signalised Intersections, Figure 8.2 Rural basic left-turn treatment (BAL).	Prior to commencement of use

**Reasons for the decision**

The reasons for this decision are as follows:

- a) TMR notes that the Lot 3 on RP732964 (the subject site) is divided into two land portions by a natural feature (creek).
- b) Currently, Lot 3 on RP732964 has an existing access to an operational raw material supply yard located in the northern portion of the site.
- c) The applicant is seeking a second access to the proposed aviation facility within the southern portion of the site.
- d) The department is allowing a second access location to be established to provide access to the southern portion of Lot 3 on RP732964 including the proposed development.

Please refer to **Attachment A** for the findings on material questions of fact and the evidence or other material on which those findings were based.

**Information about the Decision required to be given under section 67(2) of TIA**

- 1. There is no guarantee of the continuation of road access arrangements, as this depends on future traffic safety and efficiency circumstances.
- 2. In accordance with section 70 of the TIA, the applicant for the planning application is bound by this decision. A copy of section 70 is attached as **Attachment B**, as required, for information.

**Further information about the decision**

1. In accordance with section 67(7) of TIA, this decision notice:
  - a) starts to have effect when the development approval has effect; and
  - b) stops having effect if the development approval lapses or is cancelled; and
  - c) replaces any earlier decision made under section 62(1) in relation to the land.
2. In accordance with section 485 of the TIA and section 31 of the *Transport Planning and Coordination Act 1994* (TPCA), a person whose interests are affected by this decision may apply for a review of this decision only within 28 days after notice of the decision was given under the TIA. A copy of the review provisions under TIA and TPCA are attached in **Attachment C** for information.
3. In accordance with section 485B of the TIA and section 35 of TPCA a person may appeal against a reviewed decision. The person must have applied to have the decision reviewed before an appeal about the decision can be lodged in the Planning and Environment Court. A copy of the Appeal Provisions under TIA and TPCA is attached in **Attachment C** for information.

**Further approvals**

The Department of Transport and Main Roads also provides the following information in relation to this approval:

1. **Road Access Works Approval Required** – Written approval is required from the department to carry out road works that are road access works (including driveways) on a state-controlled road in accordance with section 33 of the TIA. This approval must be obtained prior to commencing any works on the state-controlled road. The approval process may require the approval of engineering designs of the proposed works, certified by a Registered Professional Engineer of Queensland (RPEQ). Please contact the department to make an application.

If further information about this approval or any other related query is required, Mr Ronald Kaden, Development Control Officer, Corridor Management should be contacted by email at [ron.p.kaden@tmr.qld.gov.au](mailto:ron.p.kaden@tmr.qld.gov.au) or on (07) 4045 7151.

Yours sincerely



**Peter McNamara**  
**Principal Engineer (Civil)**

**Attachments:** Attachment A – Decision evidence and findings  
Attachment B - Section 70 of TIA  
Attachment C - Appeal Provisions  
Attachment D - Permitted Road Access Location Plan

**Attachment A**

### Decision Evidence and Findings

Evidence or other material on which findings were based:

Title of Evidence / Material	Prepared by	Date	Reference no.	Version / Issue
TMR Layout Plan (8202 - 22.22km)	Queensland Government Transport and Main Roads	02 April 2020	TMR20-29620 (500-724)	A
Site Distance Assessment	Trinity Engineering and Consulting	18 February 2020	Sketch 1376.01	B

70



**Attachment B**  
**Section 70 of TIA**

*Transport Infrastructure Act 1994*  
Chapter 6 Road transport infrastructure  
Part 5 Management of State-controlled roads

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**70 Offences about road access locations and road access works, relating to decisions under s 62(1)**

- (1) This section applies to a person who has been given notice under section 67 or 68 of a decision under section 62(1) about access between a State-controlled road and adjacent land.
- (2) A person to whom this section applies must not—
- (a) obtain access between the land and the State-controlled road other than at a location at which access is permitted under the decision; or
  - (b) obtain access using road access works to which the decision applies, if the works do not comply with the decision and the noncompliance was within the person's control; or
  - (c) obtain any other access between the land and the road contrary to the decision; or
  - (d) use a road access location or road access works contrary to the decision; or
  - (e) contravene a condition stated in the decision; or
  - (f) permit another person to do a thing mentioned in paragraphs (a) to (e); or
  - (g) fail to remove road access works in accordance with the decision.

Maximum penalty—200 penalty units.

- (3) However, subsection (2)(g) does not apply to a person who is bound by the decision because of section 68.

**Attachment C**  
**Appeal Provisions**

*Transport Infrastructure Act 1994*  
Chapter 16 General provisions

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**485 Internal review of decisions**

- (1) A person whose interests are affected by a decision described in schedule 3 (the *original decision*) may ask the chief executive to review the decision.
- (2) The person is entitled to receive a statement of reasons for the original decision whether or not the provision under which the decision is made requires that the person be given a statement of reasons for the decision.
- (3) The *Transport Planning and Coordination Act 1994*, part 5, division 2—
  - (a) applies to the review; and
  - (b) provides—
    - (i) for the procedure for applying for the review and the way it is to be carried out; and
    - (ii) that the person may apply to QCAT to have the original decision stayed.

**485B Appeals against decisions**

- (1) This section applies in relation to an original decision if a court (the appeal court) is stated in schedule 3 for the decision.
- (2) If the reviewed decision is not the decision sought by the applicant for the review, the applicant may appeal against the reviewed decision to the appeal court.
- (3) The *Transport Planning and Coordination Act 1994*, part 5, division 3—
  - (a) applies to the appeal; and
  - (b) provides—
    - (i) for the procedure for the appeal and the way it is to be disposed of; and
    - (ii) that the person may apply to the appeal court to have the original decision stayed.
- (4) Subsection (5) applies if—
  - (a) a person appeals to the Planning and Environment Court against a decision under section 62(1) on a planning application that is taken, under section 62A(2), to also be an application for a decision under section 62(1); and

(b) a person appeals to the Planning and Environment Court against a decision under the Planning Act on the planning application.

(5) The court may order—

(a) the appeals to be heard together or 1 immediately after the other; or

(b) 1 appeal to be stayed until the other is decided.

(6) Subsection (5) applies even if all or any of the parties to the appeals are not the same.

(7) In this section—

*original decision* means a decision described in schedule 3.

*reviewed decision* means the chief executive's decision on a review under section 485.

**31 Applying for review**

- (1) A person may apply for a review of an original decision only within 28 days after notice of the original decision was given to the person under the transport Act.
- (2) However, if—
  - (a) the notice did not state the reasons for the original decision; and
  - (b) the person asked for a statement of the reasons within the 28 days mentioned in subsection (1)the person may apply within 28 days after the person is given the statement of the reasons.
- (3) In addition, the chief executive may extend the period for applying.
- (4) An application must be written and state in detail the grounds on which the person wants the original decision to be reviewed.

**32 Stay of operation of original decision**

- (1) If a person applies for review of an original decision, the person may immediately apply for a stay of the decision to the relevant entity.
- (2) The relevant entity may stay the original decision to secure the effectiveness of the review and any later appeal to or review by the relevant entity.
- (3) In setting the time for hearing the application, the relevant entity must allow at least 3 business days between the day the application is filed with it and the hearing day.
- (4) The chief executive is a party to the application.
- (5) The person must serve a copy of the application showing the time and place of the hearing and any document filed in the relevant entity with it on the chief executive at least 2 business days before the hearing.
- (6) The stay—
  - (a) may be given on conditions the relevant entity considers appropriate; and
  - (b) operates for the period specified by the relevant entity; and
  - (c) may be revoked or amended by the relevant entity.
- (7) The period of a stay under this section must not extend past the time when the chief executive reviews the original decision and any later period the relevant entity allows the applicant to enable the applicant to appeal against the decision or apply for a review of the decision as provided under the QCAT Act.

(8) The making of an application does not affect the original decision, or the carrying out of the original decision, unless it is stayed.

(9) In this section—

*relevant entity* means—

(a) if the reviewed decision may be reviewed by QCAT—QCAT; or

(b) if the reviewed decision may be appealed to the appeal court—the appeal court.

### **35 Time for making appeals**

(1) A person may appeal against a reviewed decision only within—

(a) if a decision notice is given to the person—28 days after the notice was given to the person; or

(b) if the chief executive is taken to have confirmed the decision under section 34(5)—56 days after the application was made.

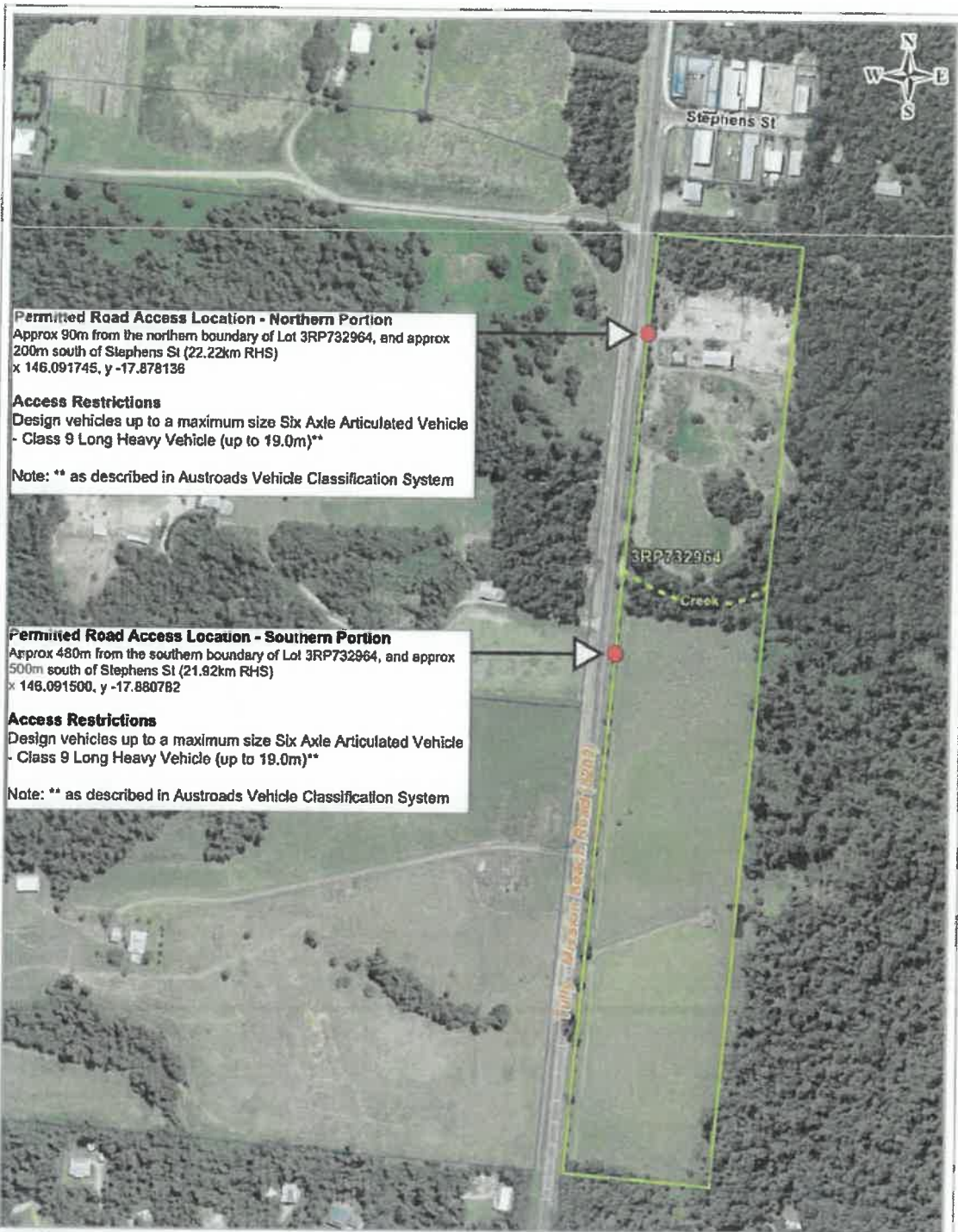
(2) However, if—

(a) the decision notice did not state the reasons for the decision; and

(b) the person asked for a statement of the reasons within the 28 days mentioned in subsection (1)(a);

the person may apply within 28 days after the person is given a statement of the reasons.

(3) Also, the appeal court may extend the period for appealing.



**Permitted Road Access Location - Northern Portion**  
 Approx 90m from the northern boundary of Lot 3RP732964, and approx 200m south of Stephens St (22.22km RHS)  
 x 146.091745, y -17.878136

**Access Restrictions**  
 Design vehicles up to a maximum size Six Axle Articulated Vehicle  
 - Class 9 Long Heavy Vehicle (up to 19.0m)\*\*

Note: \*\* as described in Austroads Vehicle Classification System

**Permitted Road Access Location - Southern Portion**  
 Approx 480m from the southern boundary of Lot 3RP732964, and approx 500m south of Stephens St (21.92km RHS)  
 x 146.091500, y -17.880782

**Access Restrictions**  
 Design vehicles up to a maximum size Six Axle Articulated Vehicle  
 - Class 9 Long Heavy Vehicle (up to 19.0m)\*\*

Note: \*\* as described in Austroads Vehicle Classification System

Branch/Unit: <b>Corridor Management / Far North Region</b>	
Projection/Datum: Geocentric Datum of Australia (GDA) 1984	
Parcels	Subject Land

**TMR Layout Plan  
 (8202 - 22.22km)**

Queensland Government Transport and Main Roads		
Plan: <b>1 / 1</b>	Issue: <b>A</b>	Date: <b>02/04/2020</b>
Drawn by: <b>RPK</b>	File ref: <b>TMR20-29520 (500-724)</b>	

Document Set ID: 2793949  
 Version: 1, Version Date: 09/04/2020

## Development Assessment Rules—Representations about a referral agency response

The following provisions are those set out in sections 28 and 30 of the Development Assessment Rules<sup>1</sup> regarding representations about a referral agency response

### Part 6: Changes to the application and referral agency responses

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#### 28 Concurrence agency changes its response or gives a late response

- 28.1. Despite part 2, a concurrence agency may, after its referral agency assessment period and any further period agreed ends, change its referral agency response or give a late referral agency response before the application is decided, subject to section 28.2 and 28.3.
- 28.2. A concurrence agency may change its referral agency response at any time before the application is decided if—
- (a) the change is in response to a change which the assessment manager is satisfied is a change under section 26.1; or
  - (b) the Minister has given the concurrence agency a direction under section 99 of the Act; or
  - (c) the applicant has given written agreement to the change to the referral agency response.<sup>2</sup>
- 28.3. A concurrence agency may give a late referral agency response before the application is decided, if the applicant has given written agreement to the late referral agency response.
- 28.4. If a concurrence agency proposes to change its referral agency response under section 28.2(a), the concurrence agency must—
- (a) give notice of its intention to change its referral agency response to the assessment manager and a copy to the applicant within 5 days of receiving notice of the change under section 25.1; and
  - (b) the concurrence agency has 10 days from the day of giving notice under paragraph (a), or a further period agreed between the applicant and the concurrence agency, to give an amended referral agency response to the assessment manager and a copy to the applicant.

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<sup>1</sup> Pursuant to Section 68 of the *Planning Act 2016*

<sup>2</sup> In the instance an applicant has made representations to the concurrence agency under section 30, and the concurrence agency agrees to make the change included in the representations, section 28.2(c) is taken to have been satisfied.

## Part 7: Miscellaneous

### 30 Representations about a referral agency response

- 30.1. An applicant may make representations to a concurrence agency at any time before the application is decided, about changing a matter in the referral agency response.<sup>3</sup>

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<sup>3</sup> An applicant may elect, under section 32, to stop the assessment manager's decision period in which to take this action. If a concurrence agency wishes to amend their response in relation to representations made under this section, they must do so in accordance with section 28.



# Attachment A.2.

RA6-N



Department of  
**State Development,  
Manufacturing,  
Infrastructure and Planning**

SARA reference: 2003-15835 SRA  
Council reference: MCU20/0006  
Applicant reference: J000975:MIS:KLG

9 April 2020

Chief Executive Officer  
Cassowary Coast Regional Council  
PO Box 887  
Innisfail Qld 4860  
enquiries@cassowarycoast.qld.gov.au

Attention: Riley Wise

Dear Sir/Madam

## **SARA response—2224 Tully Mission Beach Road, Mission Beach**

(Referral agency response given under section 56 of the *Planning Act 2016*)

The development application described below was confirmed as properly referred by the Department of State Development, Manufacturing, Infrastructure and Planning on 11 March 2020.

### **Response**

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Outcome:	Referral agency response – with conditions.
Date of response:	9 April 2020
Conditions:	The conditions in <b>Attachment 1</b> must be attached to any development approval.
Advice:	Advice to the applicant is in <b>Attachment 2</b> .
Reasons:	The reasons for the referral agency response are in <b>Attachment 3</b> .

### **Development details**

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Description:	Development permit	Material change of use Air Services (Aviation Facility)
SARA role:	Referral Agency.	
SARA trigger:	Schedule 10, Part 9, Division 4, Subdivision 2, Table 4 (Planning Regulation 2017) – Material Change of Use near a State Transport	

Page 1 of 7

Far North Queensland regional office  
Ground Floor, Cnr Grafton and Hartley  
Street, Cairns  
PO Box 2358, Cairns QLD 4870

Document Set ID: 2793949  
Version: 1, Version Date: 09/04/2020

Corridor

SARA reference: 2003-15835 SRA

Assessment Manager: Cassowary Coast Regional Council

Street address: 2224 Tully Mission Beach Road, Mission Beach

Real property description: Lot 3 on RP732964

Applicant name: Mission Helicopters Pty Ltd  
C/- Gilvear Planning Pty Ltd

Applicant contact details: PO Box 228  
BABINDA QLD 4861  
josh@gilvearplanning.com.au

State-controlled road access permit: This referral included an application for a road access location, under section 62A(2) of *Transport Infrastructure Act 1994*. Below are the details of the decision:

- Approved
- Reference: TMR20-029620 (500-724)
- Date: 3 April 2020

If you are seeking further information on the road access permit, please contact the Department of Transport and Main Roads at [caims.office@tmr.qld.gov.au](mailto:caims.office@tmr.qld.gov.au).

## Representations

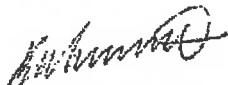
An applicant may make representations to a concurrence agency, at any time before the application is decided, about changing a matter in the referral agency response (s.30 Development Assessment Rules)

Copies of the relevant provisions are in **Attachment 4**.

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

For further information please contact Jarrod Clarke, Planning Officer, on 40373208 or via email [CaimsSARA@dsdmip.qld.gov.au](mailto:CaimsSARA@dsdmip.qld.gov.au) who will be pleased to assist.

Yours sincerely



Brett Nancarrow  
Manager (Planning)

cc Mission Helicopters Pty Ltd C/- Gilvear Planning Pty Ltd, [josh@gilvearplanning.com.au](mailto:josh@gilvearplanning.com.au)

enc Attachment 1 - Referral agency conditions  
Attachment 2 - Advice to the applicant  
Attachment 3 - Reasons for referral agency response  
Attachment 4 - Representations provisions  
Attachment 5 - Approved plans and specifications

### Attachment 1—Referral agency conditions

(Under section 56(1)(b)(i) of the *Planning Act 2016* the following conditions must be attached to any development approval relating to this application) (Copies of the plans and specifications referenced below are found at Attachment 5)

No.	Conditions	Condition timing
<b>Development Permit – Material Change of Use</b>		
Schedule 10, Part 9, Division 4, Subdivision 2, Table 4 - The chief executive administering the <i>Planning Act 2016</i> nominates the Director-General of Department of Transport and Main Roads to be the enforcement 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.	<p>a) The road access locations are to be located generally in accordance with TMR Layout Plan (8202 – 22.22km), prepared by Queensland Government Transport and Main Roads, dated 02/04/2020, Reference TMR20-29620 (500-724), Issue A.</p> <p>(b) Road access works comprising of treatment and sealing works for a rural property access, a basic right-turn (BAR) and rural basic left turn (BAL) must be provided at the southern portion road access location.</p> <p>(c) The road access works must be designed and constructed in accordance with Austroads Guide to Road Design, Part 4: Intersections and Crossing – General and 4A: Unsignalised and Signalised Intersections, specifically:</p> <ul style="list-style-type: none"> <li>• Figure 7.2 (rural property access - single or dual carriageway (conditional));</li> <li>• Figure A 28 Basic right (BAR) turn treatment on a two-lane rural road; and</li> <li>• Figure 8.2 Rural basic left-turn treatment (BAL).</li> </ul>	<p>(a) At all times.</p> <p>(b) and (c): Prior to the commencement of use.</p>
2.	<p>(a) Stormwater management of the development must ensure no worsening or actionable nuisance to the state-controlled road.</p> <p>(b) Any works on the land must not:</p> <ol style="list-style-type: none"> <li>(i) create any new discharge points for stormwater runoff onto the state-controlled road;</li> <li>(ii) interfere with and/or cause damage to the existing stormwater drainage on the state-controlled road;</li> <li>(iii) surcharge any existing culvert or drain on the state-controlled road;</li> <li>(iv) reduce the quality of stormwater discharge onto the state-controlled road.</li> </ol>	<p>(a) &amp; (b) At all times.</p>

## Attachment 2—Advice to the applicant

General advice	
1.	Terms and phrases used in this document are defined in the <i>Planning Act 2016</i> its regulation or the State Development Assessment Provisions (SDAP) [v2.6]. If a word remains undefined it has its ordinary meaning.
2.	<p>When considering any future development on the site, particularly the vacant southern portion, in accordance with s67 of the <i>Planning Act 2016</i>, a future development condition must not be inconsistent with a development condition of an earlier development approval in effect for the development, unless –</p> <ul style="list-style-type: none"> <li>(a) both conditions are imposed by the same person; and</li> <li>(b) the applicant agrees in writing to the later condition applying; and</li> <li>(c) if the development application for the later development approval was required to be accompanied by the consent of the owner of the premises – the owner of the premises agrees in writing to the later condition applying.</li> </ul> <p>Any increase in the number of access locations associated with future development on the southern portion of the site has the potential to create a safety hazard for users of a state-controlled road or result in a worsening of operating conditions on a state-controlled road.</p> <p>If the applicant / landowner intends to undertake a future development over the southern portion of Lot 3 on RP732964, the applicant / landowner should ensure and demonstrate that vehicular access can be achieved via the approved access location to the southern portion of Lot 3 on RP732964.</p>
Advertising device	
3.	<p>Advertising advice should be obtained from the Department of Transport and Main Roads (DTMR) if the approved development intends to erect, alter or operate 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 139 of the Transport Operations (Road Use Management - Accreditation and Other Provisions) Regulation 2015 to require removal or modification of an advertising sign and / for a device which is deemed that it creates a danger to traffic.</p>
Road Works Approval	
4.	<p>In accordance with section 33 of the Transport Infrastructure Act 1994 (TIA), an applicant must obtain written approval from Department of Transport and Main Roads (DTMR) to carry out road works, including road access works on a state-controlled road. Please contact DTMR on 4045 7144 to make an application under section 33 of the TIA to carry out road works. This approval must be obtained prior to commencing any works on the state-controlled road. The approval process may require the approval of engineering designs of the proposed works, certified by a Registered Professional Engineer of Queensland (RPEQ).</p> <p>The road works approval process takes time – please contact Transport and Main Roads as soon as possible to ensure that gaining approval does not delay construction.</p>

### **Attachment 3—Reasons for referral agency response**

(Given under section 56(7) of the *Planning Act 2016*)

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**The reasons for the department's decision are:**

- The proposal is for a material change of use for air services to establish an aviation facility within the southern portion of the subject site.
- The subject site has road frontage and access via Tully-Mission Beach Road, a state-controlled road.
- Access to the subject site is via a sealed access via the existing northern portion of the lot. The applicant sought a new vehicle access to the southern portion of the lot.
- The department carried out an assessment of the development application against State code 1 and found that, with conditions, the proposed development:
  - will not create a safety hazard for users of the state-controlled road.
  - will not compromise the structural integrity or result in the worsening of the physical condition or operating performance of the state-controlled road.
  - will not compromise the state's ability to operate, maintain or construct state-controlled roads.

**Material used in the assessment of the application:**

- The development application material and submitted plans
- *Planning Act 2016*
- *Planning Regulation 2017*
- *The State Development Assessment Provisions* (version [2.6]), as published by the department
- *The Development Assessment Rules*
- SARA DA Mapping system

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**Attachment 4—Change representation provisions**

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(page left intentionally blank – attached separately)

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**Attachment 5—Approved plans and specifications**

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