APPENDIX B

MOD 3 (MP 06_0309) FOR A LIMITED USE HELIPAD

PPR SUMMARY RESPONSE TABLE TO LMCC SUBMISSION 16 DECEMBER 2016 – ACOUSTIC MATTERS

TRINITY POINT MARINA & MIXED USE DEVELOPMENT AT MORISSET PARK

ITEM RAISED	RESPONSE
Acoustic Impact (Pages 1 – 3 of LMCC Submission)	
The *"Acoustic Assessment. Proposed Helipad. Trinity Point Development. Ref 46.4732.R7B:MSC"* dated 31 October 2016 by The Acoustic Group (the TAG Report) has been reviewed. Council staff and Council's retained expert were consulted during the establishment of the methodology for acoustic testing, and were present when the testing was undertaken on 24 March 2016. It is confirmed that the report is consistent with the agreed methodology and on-site testing. Council is advised by its expert that the TAG Report is generally robust and satisfactorily addresses the Secretary's Environmental Assessment Requirements issued by the Department on 6 July 2016. The approach taken in the TAG Report in deriving acceptable noise criteria for the proposal appears to be comprehensive. Despite some editorial issues (see below), the TAG Report provides relevant and appropriate background data, assessment criteria, summary and conclusions. In Council staff's opinion, both acoustic experts agree on the finding that the application of the Australian Noise Exposure Forecast, AS2363 and AS2021 provide the best evaluation methodology. The proposed helipad operation is able to be carried out in compliance with ANEF20. If the development is supported by the Department, a suite of conditions is respectfully recommended to assist in mitigating	It is noted that Council staff and its appointed acoustic expert confirm that: • The acoustic assessment submitted with the Environmental Assessment Report (EA) is consistent with the agreed methodology and on-site testing. • The TAG report is robust and satisfies the SEARs. • Despite some minor editorial issues, the TAG report provides relevant background data, assessment criteria, summary and conclusions. • Council's acoustic expert agrees with the TAG report that the best evaluation methodology is the application of the Australian Noise Exposure Forecast, AS2363 and AS2021. • The proposed helipad operation is able to be carried out in compliance with ANEF 20. • A suite of draft conditions of consent were recommended to regulate the operation of the helipad. The commentary and suggested edits as noted are welcomed by the proponent. Provided below are responses to the editorial comments and draft conditions of consent supplied by LMCC.

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acoustic impacts and regulating the operation of the helipad. These conditions are included as Appendix A to this letter and would form recommended conditions of any development consent, should the application be recommended for approval.	
TAG Report – Editorial Comment	
The following matters are raised for completeness only, and do not affect the conclusions or recommendations of the TAG Report:	
1.0 Introduction • The helicopter used for the on-site testing in March 2016 was a 'Firebird 288'. The TAG Report indicates it was an Airbus H125 (formerly Eurocopter AS350FB2 or Aerospatiale AS 350F). The TAG Report should clarify the helicopter used on the day of the testing.	The TAG report correctly identifies that the helicopter used for the on-site testing in March 2016 was an Airbus H125 (formerly identified as a Eurocopter A350). This is confirmed on pages 127 and 128 of the EA Report. The pilot flying the helicopter confirmed the model of the helicopter. It is understood that there is no model of helicopter known as the 'Firebird 288'.
2.0 Measurement Techniques • Site testing measurements were carried out in accordance with AS2363-1999. The TAG Report should state that it is the 1999 version of AS2363 as there is also a 1990 version later referred to in the report. • NATA Certificates should be appended to the TAG Report as evidence that the measuring equipment complies with clause 4.3.5 of AS2363-1999.	• Australian Standard AS2363 defines various components of helicopter operations for assessment purposes, the method of measurement, and analysis procedures to be adopted. AS2363-1990 was published in 1990 and Appendix A provided acceptability criteria for 12-hour periods of operation. The acceptability criteria were provided by the Civil Aviation Authority (now Air Services Australia) and were based on the ANEF system used for the assessment of aircraft noise in Australia (established under AS2021). In 1999 the second version of AS2363 was issued. It incorporated minor amendments to the assessment procedure and excluded the recommended acceptability levels in Appendix A. Section 6 of the second version of Standard AS2363 required the assessment to be compared with criteria set by the relevant statutory authority. The first paragraph of section 3.5 of the acoustic assessment (refer to **Appendix E** of this PPR) has been amended to identify the basis of using the 1990 version of AS 2363 for the analysis because the 1990 version has recommended criteria. In the absence of EPA noise criteria, the most relevant criteria are the Air Services Australia 20 ANEF criteria, derived from AS 2021 Acoustics –

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	Aircraft noise intrusion – Building siting and construction. Section 4 of the TAG Acoustic Assessment establishes that the ANEF system is the appropriate criteria for determining the acoustic acceptability of helicopter noise associated with the proposed helipad. Although the criteria in Table A1 of 2363-1990 are no longer current, it is still appropriate to use the table to supplement an analysis against the ANEF 20 criteria and to confirm the acceptability of noise impacts. Accordingly, as a precautionary measure, TAG assessed the proposed helicopter operation against the targets established within AS2363-1990. This 1990 version was used as it provides an opportunity to consider noise acceptability criteria modified relative to the ambient noise environment of the locality where the 1999 version excludes any criteria. In the view of TAG, this results in a more conservative and comprehensive assessment of potential noise impacts. The sixth paragraph in Section 2 of the acoustic assessment identified testing in accordance with the 1990 version of AS 2363. TAG confirms that the testing was undertaken in accordance with AS2363-1990 for the reasons outlined above. The seventh paragraph in Section 3.5 of the acoustic assessment identified the analysis was undertaken in accordance with AS 2363-1990, because the 1990 version has no recommend noise limits. • There is no requirement under either version of AS 2363 to have NATA Certificates. The two B & K 2250 meters and two of the SVAN 979 meters were less than 2 years old at the time of the monitoring whilst the third Svan 979 had been calibrated within two years of the testing and those meters automatically complied with clause 5.3.5 of AS 2363-1990. The measuring equipment complies with clause 5.3.5 of AS 2363-1990 with respect to the comprehensive recalibration conducted in the TAG laboratory (being the former Challis Consulting NATA Laboratory No 744). The recalibration of the instrumentation (in accordance with AS

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	2659.1-1988) is reference traceable to NML (NATA Lab 001) calibrated B & K microphone and B & K multifunction calibrator. Furthermore, some instrumentation also carried calibration to manufacturer's requirements (less than 2 years old) or NATA requirements.
3.0 Measurement Results • There is a typographical error in the paragraph following Table 1 where the reference to Appendix I should be a reference to Appendix H. • The TAG Report at page 45 states that Locations 1 and 6 experience the highest helicopter noise levels, however according to the data in Appendix E, this appears to be incorrect. • There appears to be an anomaly in Appendix E1 for movement 12 at Location 5 for the take off mode 2A Anti-clockwise in which the reported LAmax/SEL noise levels are 69/78. These levels appear unusually low when compared with the other values for this mode and should be checked / confirmed.	• The typographical error following Table 1 has been corrected to reference Appendix H in a revised Acoustic Assessment (refer to **Appendix E** of the PPR). • The TAG Acoustic Assessment has been updated to confirm that Locations 1 and 5 experience the highest noise levels, in accordance with the results provided in Appendix E and F5. • Movement 12 at Location 5 in Appendix E1 has been amended to LAmax/SEL of 74/82. The 68 was the turn for take off. Maximum for movement 37 at location 5 has been increased from 69 to 73 dB(A). The amendments to movement 12 does not generate any increase in the average maximum level for Take offs for 2A anti-clockwise but causes a 0.2 dB(A) increase in the averages SEL. The consequences of the correction for movement 12 leads to a 0.1dB increase in the Leq/ANEF results for location 5 for scenarios 2 and 4, in Tables 3, 4 and 8 of the Acoustic Assessment (refer to Appendix E of the PPR) and a 0.1dB increase for location 5, scenario 2 in Tables 6 and 7, which are insignificant increases. The amendment to movement 37 resulted in a 1 dB increase in the average maximum level at location 5 for Landings using 1A Clockwise and an increase in the average SEL of 0.1 dB. The Tables on Appendix E1, E2 and E5 have been adjusted accordingly in the revised acoustic assessment (refer to **Appendix E** of the PPR).
4.0 Acoustic Criteria • The value of 55 for location 1(7) in Table 2 of the TAG Report is in error as it should be 58. This appears to make no difference to the conclusions in the TAG Report,	This comment is incorrect. From Table 1 of the acoustic assessment the daytime ambient level for location 1 is 45 dB(A). From Appendix A of AS 2363-1990 whilst the table nominates 60 dB(A) for the daytime period, Note 2 to the Table gives a target of ambient background + 10 dB, i.e. 45 + 10 =

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however this should be verified by the report's author.	55 dB(A) not 58 dB(A).
5.0 Acoustic Assessment • In Appendix A of the TAG Report there is no flight path denoted as 'b'. There is only B1 and B2. Flight path 'b' refers to the flight path used for the test measurements. • Flight path 'C' in Appendix A was not subject to testing and an approximate estimate only of the SEL and LAmax noise levels is required. • There is no flight path defined in Appendix A for take offs directly to the north. • Table 8 in the TAG Report assume all 8 movements will occur in the night-time period which is inconsistent with the ANEF modelling which assumed only 2 movements in this period. Table 8 should be split in two and the day-time modelled with 6 movements and the night-time modelled with 2 movements, if this is the most likely scenario.	• Correct. Appendix A of the TAG report contains the preferred approach and departure flight paths based on the flight paths flown on the acoustic test day, acoustic assessment, consideration of different wind conditions, fly neighbourly principles and appropriate obstacle free surfaces. The plans include: o Path A – Involves approaching the helipad from the south (over water) and exits the helipad to the south (over water) in a clockwise direction. This flight path is suitable when there are no prevailing winds, in all calm conditions and when the wind is from the north, north east, north west and east. o Path B1 – Involves approaching the helipad from the south (over water) and exits the helipad to the south (over water) in an anti-clockwise direction. This flight path is suitable when the wind is from the north west, west and south west. o Path B2 – Involves approaching the helipad from the south (over water) and exits the helipad to the south (over water) in an anti-clockwise direction. This flight path is designed for helicopter landing and take off in a strong southerly wind. This flight path is suitable when the wind is from the south, south east and south west. o Path C – Involves approaching from the north and exiting to the south (over water). This option also provides for a helicopter, having departed to the south to conduct a turn movement that allows it to travel north if desired. This flight path is suitable when the wind is from the south west, south and south east. There is no flight path referred to solely as flight path 'b'. Separate to the above-mentioned preferred flight paths, during the acoustic testing, there were a number of options that were tested and these are shown as Appendix C of the TAG report (the actual tracks were determined from GPS data of the helicopter). Any reference to a flight path 'A' (ie. 1A or 2A) represents approach and departure from/to the south and any reference to flight path 'B' (ie. 1B or 2B) represents approach and departure from/to the north. The test flights were named as follows:

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	o Test Flight Path 2A – Involved an approach from the south and departure to the south from the proposed helipad location. o Test Flight Path 2B – Involved an approach from the north and departure to the north from the proposed helipad location. o Test Flight Path 1A – Involved an approach from the south and departure to the south from an alternate (not proposed) helipad location. o Test Flight Path 1B – Involved an approach from the north and departure to the north from an alternate (not proposed) helipad location. • Path C as shown in Appendix A was tested. The TAG assessment assumed a mix of operations on the flight paths that were used in the testing (refer to Appendix C of the TAG assessment). Section 5 of the TAG report identified on the basis of equal distributions to derive the following scenarios: o **Scenario 1** – 4 landings using flight path 2a (clockwise) from the south + 4 take offs using flight path 2a (clockwise) to the south; o **Scenario 2** – 4 landings using flight path 2a (anticlockwise) from the south +4 take offs using flight path 2a (anticlockwise) to the south; o **Scenario 3** – 4 landings using flight path 2a (clockwise) from the south + 4 take offs using flight path 2b to the north; and o **Scenario 4** – landings using flight path 2b from the north + 4 take offs flight path 2a anticlockwise to the south. All flight path scenarios have been appropriately tested and considered by the TAG assessment. • Correct. None of the preferred flight paths proposed depart from the helipad directly to the north. Preferred flight path C provides an option for a helicopter, having departed to the south to conduct a turn movement and then travel to the north if required. The aviation consultant Avipro have advised that whilst flight path C is operationally acceptable, in practice the majority of flights are expected to be from and to the south.

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	• Table 8 of the acoustic assessment is headed "12 Hour Daytime Helicopter Leq Contribution as per AS 2363 for 8 movements". This table is contained in a section of the acoustic assessment that discusses the AS2363 assessment. Table 8 provides the results for all movements restricted to a 12 hour period. Whether all the flights occur in the daytime period or the night time period (as defined in AS 2363-1990 and the ANEF system) the resultant LAeq will be the same. Table 8 identifies that with respect to AS 2363-1990 the 8 flights (whether all in the day or all in the night) satisfy AS 23623-1990 criteria and is the appropriate table for Section 5.2 – which is not about the ANEF. If the flights were restricted to 6 in the day and 2 at night then obviously the LAeq levels would be lower and therefore satisfy both the AS2363 criteria (for each location) by a significant safety margin.
Recommended Conditions – Acoustic Mitigation and Regulation	
1.0 Maximum Number of Flights The number of flight movements shall not exceed the following: (a) A maximum of eight (8) movements per day (i.e. 4 landings and 4 departures) with no more than two (2) of those movements occurring after 7:00pm (i.e. 1 landing and 1 departure); and (b) A maximum of 38 movements per week (i.e. 19 landings and 19 departures). This condition does not apply to movements which are associated with an emergency involving a police matter or a medical emergency.	Noted.
2.0 Approved Flight Modes The helipad shall operate only in one of the approved flight	Noted – with reference to the revised acoustic report as requested by Council (refer to **Appendix E** of the PPR).

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	modes which are described in the acoustic assessment report entitled *Acoustic Assessment. Proposed Helipad. Trinity Point Development. Ref* ***48.4732.R7C:MSC"*** **dated 23 April 2018** by The Acoustic Group: • Path A: approach from the south and departure to the south in calm winds; • Path B1: approach from the south and departure to the south in westerly winds; • Path B2: approach from the south and departure to the south in southerly winds; and • Path C: approach from the north and departure to the south and then banking around and proceeding to the north in southerly winds. Any revision to the flight modes must be submitted to Lake Macquarie City Council for approval and must be accompanied by a detailed acoustic report prepared by an appropriately qualified acoustic consultant who possesses the qualifications to render them eligible for combined membership of the Australian Acoustic Society and Institution of Engineers Australia or membership of the Australian Association of Acoustic Consultants, before the use of the revised flight mode commences.	
3.0	*Operating Hours* Operating hours of the helipad are as follows: From 8:00am Monday to Saturday and from 9:00am Sundays and Public Holidays, to sunset (seasonably variable). Ancillary works on the helipad such as cleaning and maintenance may be undertaken outside of these hours, but shall not interfere with the amenity of the neighbourhood by reason of noise, dust or emissions of any	Noted.

<table>
<tr><th>ITEM RAISED</th><th>RESPONSE</th></tr>
<tr><td>kind.</td><td></td></tr>
<tr><td>4.0 Noise Minimisation

The helipad shall be operated in accordance with the “Fly Neighbourly Guide” published by the Helicopter Association International, as amended from time to time.

Engines shall be turned off within 30 seconds of landing, except where this is not safe to do so in the pilot’s estimation.</td><td>Noted.</td></tr>
<tr><td>5.0 No refuelling, Engine Maintenance or Servicing

No refuelling, engine maintenance or servicing of any helicopter shall be undertaken on the site.</td><td>Noted. No refuelling nor any regular engine maintenance or servicing is intended.</td></tr>
<tr><td>6.0 Noise Limits

The maximum noise levels from helicopter movements associated with the facility when measured in any 12 hour period on any day shall not exceed the following at any receptor location:

<table>
<tr><th>Receptor Location</th><th>LAeq,T(Hel)</th><th>LAmax(Hel)</th></tr>
<tr><td>Daytime (0700 hours to 1900 hours)</td><td></td><td></td></tr>
<tr><td>1, 7</td><td>58</td><td>85</td></tr>
<tr><td>2</td><td>59</td><td>85</td></tr>
<tr><td>3,4,5,6</td><td>56</td><td>85</td></tr>
<tr><td>Evening (1900 hours to sunset)</td><td></td><td></td></tr>
<tr><td>1, 7</td><td>50</td><td>80</td></tr>
<tr><td>2</td><td>50</td><td>80</td></tr>
<tr><td>3,4,5,6</td><td>50</td><td>80</td></tr>
</table>

The receptor locations defined in the Table above are those referred to in the Acoustic Assessment. Proposed Helipad. Trinity Point Development. Ref 48.4732.R7C:MSC” dated 23 April 2018 by The Acoustic Group.</td><td>Noted and updated to reference the revised Acoustic Assessment as requested by LMCC (refer to Appendix E of PPR). Includes correction to Leq, T hel for location 1 and 7 to be 50 dB(A).

To be consistent with AS 2363, ‘Evening (1900) hours to sunset’ should be changed to ‘Night (1900) hours to last light ‘(correct aviation terminology).

Recommended that condition be updated to reference measuring under AS2363-1990. It should be AS 2363-1990 and not AS2363-1990 to agree with the 12 hour period criteria.</td></tr>
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Noise levels shall be measured in accordance with AS2363-1999 "Acoustics – Measurement of noise from helicopter operations' with the exception that: (a) The modes of operation specified in Section 4.5 and Section 4.6 of the AS2363-1999 shall be as defined in the Approved Flight Modes condition of this consent; and (b) The measurements shall be done in prevailing wind conditions with a wind speed at the microphone not exceeding 5m/sec. Noise from helicopters shall include noise from take off and landing and any operations whilst on the helipad arising from start up, idle, power up and shutdown.	
7.0 Noise Compliance Measurement and Verification An appropriately qualified acoustic consultant who possesses the qualifications to render them eligible for combined membership of the Australian Acoustical Society and Institution of Engineers Australia or membership of the Australian Association of Acoustic Consultants shall be appointed and details of that appointment shall be submitted to Council before operation of the Helipad commences. Within the first 60 days of commencement of use of the helipad, acoustic monitoring shall be undertaken in accordance with the following: (a) The acoustic consultant shall: (i) measure for a period of 7 continuous days when the helipad is operating at its maximum capacity and verify that the noise emanating from the helipad complies with the noise criteria in the 'Noise Limits' condition of this consent; and	Whilst JPG agree that noise compliance measurement and verification is essential for the operation of the helipad, it is the position of JPG and its acoustic expert that draft condition 7(a)(i) is unworkable and unrealistic, and should be amended based on the following: • 'Maximum Capacity' has not been defined in the condition. Does 'maximum capacity' refer to maximum frequency of movements (ie. 8 movements per day / 38 movements per week); or maximum helicopter size using the helipad (ie. the largest of the helicopters as outlined within Section 3.2.2 of the EA Report and discussed within Section 5.6 of the TAG Acoustic Assessment); or maximum capacity of the helicopters that are using the helipad during the testing period ? If it is assumed that Council intends that the condition refers to maximum frequency of movements per day (8) and per week (38). It is requested that the condition be amended to clarify. If it is assumed that the Council intends the condition to refer to maximum loading of the helicopter then that situation cannot occur. A helicopter arriving with passengers will not be at maximum load even if the helicopter left the departure point at maximum load because fuel

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(ii) the measurements shall be performed in accordance with AS2363-1999 (Standard) with the exception that: (a) the modes of operation specified in Section 4.5 and 4.6 of AS2363-1999 shall be as defined in the 'Approved Flight Modes' condition of this consent; and (b) the measurements shall be done in prevailing wind conditions with a wind speed at the microphone not exceeding 5m/sec. (iii) if necessary, make recommendations to ensure that the noise emanating from the helipad complies with the noise criteria in the 'Noise Limits' condition of this consent. (iv) submit the report including recommendations to Council within 21 days of completing the measurements. Note: For the purpose of this condition, the noise measurements must (i) be taken on days when the helipad is operating at or near maximum usage capacity or an allowance is made in the noise readings to account for maximum usage capacity; (ii) include all receptor locations identified in the Noise Limits condition of this consent; (iii) include the whole of the operating hours for the period of measurements. (b) If the acoustic consultant recommends that additional requirements or works be undertaken under condition (a)(iii) above, those recommendations shall	will be burnt off during the arrival flight. If the same helicopter then departs with only the pilot then the helicopter will not (and cannot) be at maximum load. • It is unknown but highly unlikely that the helipad will operate at or near its maximum movement frequency within the first 60 days of commencement. It may potentially take a number of years before maximum frequency is reached. Additionally, given that the helipad will only be used on a demand basis (ie. no regularly scheduled helicopter movements) it is not possible for JPG to predict a week when 'maximum capacity' will be reached. • Accordingly, it is requested that the condition be amended to require an acoustic compliance test be undertaken within 90 days of commencement of helipad operation, with the results extrapolated to assess at maximum number of flights for the helicopter types/distribution tested, and cross-checked with the acoustic assessment. • JPG and its acoustic expert are of the position that locating a noise logger at each of the 7 receptor locations for 7 continuous days of measurement (as outlined in note (ii)) is not warranted or needed. The results of the TAG Acoustic Assessment, which were in part based on actual helicopter testing, confirmed that the highest helicopter noise levels were recorded at receptor location 1 (on the Trinity Point site) followed by receptor location 5 (public foreshore – Brightwaters jetty) on the eastern side of Bardens Bay) and receptor 4 (adjacent to Brightwaters Christian College) during northern flight movements only. Notwithstanding this, it is noted that noise levels at all receptors were significantly below the ANEF 20 criteria. It is considered reasonable that noise compliance measurement be limited to locations 1, 4 and 5 and it is requested that the draft condition be amended accordingly. The amended condition should identify the testing can be undertaken by unattended loggers, which is

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be implemented to the satisfaction of both the acoustic consultant and Council within one month from the date of the acoustic consultant's report referred to in condition (a)(iv) above. (c) if the acoustic consultant's recommendations are not implemented in accordance with this condition, the helipad shall not operate until such time as the recommendations are approved by Council and implemented.	not expressed in the current condition that could be interpreted as attended measurements for 7 days and 7 locations. It is noted that locations 4 & 5 were in the public domain and there would be issues with security of the loggers. The condition should reflect the use of secure locations in proximity to locations 1, 4 and 5, subject to identification of the monitoring site(s) with respect to exposure to the flight paths. Draft condition 7(b) is noted. Draft condition 7(c) is noted.
8.0 Noise Monitoring Terminal A Noise Monitoring Terminal (NMT) shall be installed at Receptor Location 1 as identified in the Noise Limits condition of this consent (or as close as practicable thereto) to measure noise levels on a continuous basis. The location of the NMT shall be approved by Council. The NMT shall comprise the following equipment: (a) A sound level analyser comprising a class 1 instrument having accuracy suitable for field and laboratory use. The instrument shall be weatherproof. (b) The instrument shall be calibrated in-situ at periodic intervals not exceeding 14 days. If the calibration adjustment should deviate by more than 1dB from the last calibration interval the instrument shall be remitted to the manufacturer for checking and service if necessary. (c) All instrumentation shall comply with IEC 61672 (parts 1-3) *'Electroacoustics – Sound Level Meters'* and IEC 60942 *'Electroacoustics – Sound Calibrators'* and shall carry current NATA certification (or if less than 2 years	The number of movements permitted for the subject site does not warrant the installation of a Noise Monitoring Terminal (NMT). There is no helipad in NSW that is licensed by the NSW EPA that requires a NMT. For a heliport where the number of flights is significantly greater (i.e. Orange East heliport) then a NMT may be warranted, however it is not necessary for Trinity Point helipad. The Standards for instrumentation do NOT require NATA calibration. Previously when the EPA controlled helipads that operated on a commercial basis (e.g. Wonderland) they required annual monitoring on one day. As alternative condition, it is considered reasonable that on an annual basis (in summer) an acoustic compliance test for 2 days of unattended monitoring at locations near reference locations 1, 4 & 5 shall be conducted to determine the helicopter contribution with respect to the Noise Limits in this consent.

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old, manufacturer's certification). (d) The LAmax,1 sec Fast and the LAeq,1sec noise levels shall be downloaded to a file server on a continuous basis including time stamp and the data shall be available in real time on a web server with a facility to interrogate historical data for up to 3 months. (e) Access to the web server shall be provided to Council upon request. (f) The LAmac,1 sec Fast and the LAeq,1 sec noise levels and time stamp and a log of flight operations (including time of take off or landing, helicopter details and flight movement details) shall be provided in excel form if requested by Council. (g) If requested by Council acting reasonably the web server browser format shall be modified to the satisfaction of Council.	
9.0 *Complaints Handling* A sign shall be permanently and prominently displayed in a public place in close proximity to the helipad containing details including a telephone number to enable persons to lodge a complaint in respect of the operation of the helipad. The telephone shall be manned during the hours of operation of the helipad and not revert to message service at these times. All complaints shall be logged in a complaints register including the date, tome, complainant details (if provided), nature of the complaint and details of how the complaint was managed or resolved. A copy of the complaints register shall be provided to Council on request.	Noted.

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Complaint records shall be kept for a minimum of three (3) years. In the event that Council receives a legitimate complaint and Council acting reasonably directs the helipad operator to undertake a noise investigation, the helipad operator shall comply with the directions issued by Council.	

TABLE – LMCC REFERRAL RESPONSE – ENVIRONMENTAL MANAGEMENT 15 DECEMBER 2016

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I refer to the subject application and advise that I have reviewed the Draft Acoustic Assessment prepared by Renzo Tonin who was engaged by LMCC to critically evaluate the report prepared by The Acoustic group for the operation of the proposed helipad at the Trinity Point Marina approved by the JRPP. Renzo's review and findings appear to be acceptable as final, and he has provided Draft conditions of Development Consent. I have also reviewed the Acoustic Report dated 31st October 2016, submitted by Steven Cooper of The Acoustic Group. This report is quite complex which reviews and evaluates various documents associated with Helicopter Noise. Notwithstanding this, both Acoustic Experts agree on the findings and application of the Australian Noise Exposure Forecast, AS2363 and AS2021 provide the best evaluation methodology. The proposed helipad operation can therefore be carried out in compliance with ANEF20. I will state at this point that I will have to rely upon the review by Renzo Tonin, as I have limited knowledge in the area of Helicopter operations.	Noted. A response to the matters raised including draft conditions is provided in the table above.