

Please note: These minutes are yet to be confirmed as a true record of proceedings

**CITY OF BUSSELTON**

**MINUTES FOR THE AIRPORT ADVISORY COMMITTEE MEETING HELD ON 8 JUNE 2016**

**TABLE OF CONTENTS**

<b>ITEM NO.</b>	<b>SUBJECT</b>	<b>PAGE NO.</b>
1.	DECLARATION OF OPENING AND ANNOUNCEMENT OF VISITORS.....	2
2.	ATTENDANCE .....	2
3.	PUBLIC QUESTION TIME.....	2
4.	DISCLOSURE OF INTERESTS .....	2
5.	CONFIRMATION OF MINUTES .....	2
5.1	Minutes of the Airport Advisory Committee Meeting held 29 April 2016 .....	2
6.	REPORTS .....	3
	BUSSELTON-MARGARET RIVER AIRPORT NOISE MODELLING .....	3
7.	GENERAL DISCUSSION ITEMS .....	12
8.	NEXT MEETING DATE .....	12
9.	CLOSURE .....	12

## MINUTES

MINUTES OF A MEETING OF THE AIRPORT ADVISORY COMMITTEE HELD IN MEETING ROOM A, CITY ADMINISTRATION SITE, HARRIS ROAD, BUSSELTON, ON 8 JUNE 2016 AT 11.00AM.

### 1. DECLARATION OF OPENING AND ANNOUNCEMENT OF VISITORS

The Presiding Member opened the meeting at 11.13am.

### 2. ATTENDANCE

Presiding Member:

Cr Gordon Bleechmore

Members:

Cr John McCallum

Cr Coralie Tarbotton

Officers:

Mrs Naomi Searle, Director, Community and Commercial Services

Mrs Jennifer May, Manger, Commercial Services

Miss Hayley Barge, Administration Officer, Governance

Apologies

Cr Paul Carter

Approved Leave of Absence

Nil

### 3. PUBLIC QUESTION TIME

Nil

### 4. DISCLOSURE OF INTERESTS

Nil

### 5. CONFIRMATION OF MINUTES

#### 5.1 Minutes of the Airport Advisory Committee Meeting held 29 April 2016

##### Committee Decision

**AIR1606/015** Moved Councillor J McCallum, seconded Deputy C Tarbotton

That the Minutes of the Airport Advisory Committee Meeting held 29 April 2016 be confirmed as a true and correct record.

**CARRIED 3/0**

## 6. REPORTS

### BUSSELTON-MARGARET RIVER AIRPORT NOISE MODELLING

<b>SUBJECT INDEX:</b>	Busselton-Margaret River Airport
<b>STRATEGIC OBJECTIVE:</b>	Infrastructure assets are well maintained and responsibly managed to provide for future generations.
<b>BUSINESS UNIT:</b>	Commercial Services
<b>ACTIVITY UNIT:</b>	Commercial Services
<b>REPORTING OFFICER:</b>	Manager, Commercial Services - Jennifer May
<b>AUTHORISING OFFICER:</b>	Manager, Community Services - Maxine Palmer
<b>VOTING REQUIREMENT:</b>	Simple Majority
<b>ATTACHMENTS:</b>	Attachment A BMRA Noise Modeling Report Attachment B Noise Modeling Peer Review Close Out Letter

### **PRÉCIS**

Following the submission of a comprehensive business case to the State Government, the City of Busselton was awarded \$55.9m for the redevelopment of the Busselton-Margaret River Regional Airport. As part of the project, environmental approvals are being sought through the Office of the Environmental Protection Authority and the Minister for the Environment using an Assessment on Proponent Information - Category A (API-A) referral, which includes submitting the noise modelling report and resulting noise contours.

This report presents the Noise Modelling Report (May 2016) prepared By To70 Aviation (Australia) Pty Ltd and noise contours to be submitted to the OEPA as part of the API-A referral.

### **BACKGROUND**

In 2014, as part of the preparation of the State Government business case the City of Busselton engaged To70 Aviation (Australia) Pty Ltd (To70) to prepare noise models and noise contours using the then Busselton Regional Airport Master Plan (2011-2031) and specifically, proposed runway infrastructure. The purpose of the noise modelling was to identify any potentially noise affected residential properties in the vicinity of the airport resulting from the proposed upgrade to the then Busselton Regional Airport which could then be used to inform the business case for noise mitigation strategies and funding.

The initial noise modelling prepared by To70 in 2014 included the preparation of Australian Noise Exposure Concept (ANEC) contours, 'Number Above' noise contours (Nxx contours) and LAmx contours.

#### Noise Modelling and Contours

Australian Noise Exposure Concepts (ANEC) are part of the Australian Noise Exposure Forecast (ANEF) System, developed in 1980 from the Noise Exposure Forecast (NEF) system used at the time and modified to suit Australian conditions became termed the ANEF system. One of the main differences of the ANEF system was that it incorporated a weighting for aircraft events for the period 7pm to 7am as opposed to the 10pm-7am period used in the NEF system.

The ANEF was primarily developed as a land use planning tool aimed at controlling encroachment on airports by urban land development, in particular noise sensitive buildings. The ANEF system is the basis for the Australian Standard AS2021: Acoustics - Aircraft Noise Intrusion – Building Siting and Construction (2015) which provides advice to land planners on the acceptability of building uses (residential, schools, hospitals, industrial etc) based on ANEF zones. The ANEF is accepted as the

current Australian standard for forecasting aircraft noise. It is a forecast of the cumulative noise effect over a twelve month period of airport operations, including all projections of aircraft movements and weather patterns, divided by 365 to show an average annual day exposure. ANEF contours are given values of 5, 10, 15, 20, 25, 30, 35 and 40, with the higher the contour value, the greater the noise effect. The ANEF system is made up of the following three noise exposure indicators that all use the same calculation models but are based on different inputs and have different purposes.

- ANEF (Australian Noise Exposure Forecast) noise contours show the anticipated/forecast noise exposure patterns around an airport and are mainly used by land use planning authorities to manage land development in the vicinity of airports.
- ANEI (Australian Noise Exposure Index) contours show the historic noise exposure patterns (based on actual aircraft movements and weather patterns) and are generally used in environmental reporting and benchmarking.
- ANEC (Australian Noise Exposure Concept) are scenario contours and are used to predict ('what if') noise contours resulting from proposed changes to airport operations.

'Number above' contours show the average number of events per day, that exceed a certain sound level and is closer to how people typically perceive noise. For example, an N65 10 noise contour represents the number of events (10) over 65 decibels (65dB(A)) for a particular area. N contours are generally used to supplement the ANEF and in particular used in community consultation as they indicate a measureable sound that the user can relate to. It is important to note that N contours represent an average day and not a typical day. Hence, on any specific day a resident may actually experience more events (or fewer) than the N contour suggests.

LAmx Single event noise contours are a basic metric and represent the maximum noise exposure (in A-weighted Decibels) likely to be experienced during an overflight of a specific aircraft type.

The scope of the noise modelling completed in 2014 included the preparation of the following;

- Standard ANEC for the current Busselton Margaret River Regional Airport infrastructure / operations and upgraded\* BMRRA infrastructure/operations projected out to twenty (20) years;
- N65, N70, N75 and N80 contours for the following scenarios:
  - upgraded aerodrome infrastructure / operations 2018/19
  - upgraded aerodrome infrastructure / operations 2022/23
  - upgraded aerodrome infrastructure / operations 2028/29
  - upgraded aerodrome infrastructure / operations 2038/39
- Single event LAmx contours
  - Fokker 100 (approach & departure for 03 and 21).
  - A320 (approach & departure for 03 and 21).
  - B737-800 (approach & departure for 03 and 21).
- The ANEC contours must meet the AirServices Australia ANEF Endorsement Criteria checklist for airports document.

\* Note- the upgraded aerodrome infrastructure was based on the Busselton Regional Airport Master Plan 2011-2031.

Following the announcement of the State Government funding to redevelop the Busselton-Margaret River Regional Airport (BMRRA) in July 2015, the City reviewed and subsequently revised the BMRRA Master Plan (2016-2036), as endorsed by the Council at its meeting on 13 April 2016 (C1604/075).

The review of the Busselton Regional Airport Master Plan (2011-2031) identified that limitations within the overall planning existed, in that the Master Plan only considered infrastructure requirements within a 20 year period. Given the opportunity to revise these requirements, the City engaged an aviation specialist to design the concept and staging plans over a longer timeframe to

ensure that the Airport was 'future proofed' for planning and development works over a longer planning horizon.

In relation to the noise modelling that had been completed in 2014, the revised master plan (2016) included changes in the design characteristics of the airside infrastructure (runway thresholds, aprons and taxiways) and hence the input assumptions for the Integrated Noise Model (INM) used to generate the ANECs and N-contours in 2014 had changed, requiring the noise modelling to be rerun. Additionally, City Officers took the opportunity to review the aircraft traffic forecast and design aircraft inputs previously developed to ensure that they were still considered appropriate for the BMRRR redevelopment and made changes where considered necessary.

In late 2015, the City of Busselton engaged To70 to update the INM with the revised infrastructure input assumptions, traffic forecasts and design aircraft and generate the ANECs and N contours underlying the BMRRR Master Plan (2016) with the specific purpose of using the contours for the environmental approval process and community consultation relating to the future BMRRR operations. The scope of works for the noise modelling was as follows;

- Review of data inputs and remodeling of ANECs, N65, N70, N75 and N80 contours previously developed (2014) including traffic forecasting;
- The remodeling of standard ANECs (20 year) for the Busselton Regional Airport Master Plan 2016 aerodrome infrastructure / operations projected for twenty (20) years.
- The preparation of N65, N70, N75, N80s for the following scenarios;
  - Master Plan (2016) aerodrome infrastructure / operations 2017/2018 (first year of operations);
  - Master Plan (2016) aerodrome infrastructure / operations 2022/2023;
  - Master Plan (2016) aerodrome infrastructure / operations 2027/2028.
  - Master Plan (2016) aerodrome infrastructure / operations 2037/2038;
- Single event LAmx contours using the Master Plan (2016) infrastructure for the following design aircraft;
  - Fokker100 (approach & departure for 03 and 21).
  - A320 (approach & departure for 03 and 21).
  - B737-800 (approach & departure for 03 and 21).
- The ANEC contours must meet the AirServices Australia ANEF Endorsement Criteria checklist for airports document.

During consultation with the OEPA on the preparation of the noise modelling and contours for the BMRRR and future airport operations to be described in the API-A referral, the OEPA recommended that the City of Busselton have a peer review of the noise modelling report and the underlying INM, assumptions and inputs performed.

As such the City called for quotations in early 2016 to peer review the noise modelling undertaken and engaged GHD to complete this work. The scope of the works of the peer review involved a desktop review of the following;

- Review and assess the data sources and attribution for aircraft movement forecasts, aircraft type selection and flight paths/tracks, track maps with labels and track assignment assumptions, details of circuit operations, stage lengths for departures and forecast horizons
- Airport setup, runway description, temperature, headwind and humidity assumptions, calculations of airport capacity runway usage assumptions, day/night split assumptions and sources

- INM model setup including version, aircraft type selection, details of terrain files (if used), base map coordinate systems etc.
- Documentation of inputs and outputs.

GHD's review provided a report containing recommended amendments and a number of questions requiring clarification. The peer review report was forwarded to To70 for consideration. Following discussions between City Officers, To70 and GHD, a number of the recommended amendments to the INM inputs and settings were implemented and the models rerun, including regeneration of the noise contours. Additionally, the written report has been updated where clarification or further detail was requested to be included. For completeness a close out report and accompanying letter has been provided by GHD (Attachment B) and will be included in the API-A referral to be submitted to the OEPA.

## **STATUTORY ENVIRONMENT**

The BMRA operates in accordance with the following; Aviation Transport Security Act 2004, Aviation Transport Security Regulations 2005, CASA MOS 139, the City of Busselton's Transport Security Plan, policies and procedures. Additionally, the BMRA operations are managed in accordance with Ministerial Statement 1009 (under the Environmental protection Act 1996) and the City's Noise Management Plan (2015).

## **RELEVANT PLANS AND POLICIES**

The Busselton Regional Airport Master Plan (2016- 2036) and BMRA Noise Management Plan (2015) are relevant to this report.

## **FINANCIAL IMPLICATIONS**

The preparation of the noise modelling reports were included in the adopted Airport Operations budget for 2015/16. There are no further cost implications for the 2015/16 or 2016/17 Airport Operations municipal budgets as a result of this report.

The State Government project funding of \$55.9m has been incorporated into the City's draft 2016/17 budget, and will form part of future budgets. The funding covers operational and capital costs associated with the project, including noise mitigation and amelioration.

### **Long-term Financial Plan Implications**

An operational financial model was developed as part of the State Government business case proposal which incorporated a 10-year financial plan. The model considered revenues and costs associated with the upgraded facility, including up-front and recurrent capital and ongoing operational expenditure, including costs relating to ongoing noise modelling, monitoring and noise amelioration if required. The model demonstrates that the upgraded facility will be self-sustainable, generating a modest profit into the future, to be transferred into the City's Airport Infrastructure Renewal and Replacement Reserve at the end of each financial year.

The Long Term Financial Plan (LTFP) is currently based on the 'here and now' scenario (stage 1b), and will now require updating to reflect the project, including ongoing operational and capital revenue and expenditure based on the Stage 2 redevelopment. This work has commenced and will be incorporated into the next LTFP review.

**STRATEGIC COMMUNITY OBJECTIVES**

The BMRA is consistent with following the City of Busselton’s strategic Objectives:

Well Planned, Vibrant and Active Places:

- Infrastructure Assets that are well maintained and responsibly managed to provide for future generations.
- Connected City of Busselton Transport options that provide greater links within our district and increase capacity for community participation.

**RISK ASSESSMENT**

Whilst a formal risk assessment is being developed as part of the overall development project, at a high level, and based on the Busselton Regional Airport Master Plan (2011-2031), a comprehensive risk assessment was undertaken as part of the development of the State Government business case proposal that identified and evaluated the effect of uncertainty on the project’s objectives and deliverables, including risk mitigation strategies. Below outlines the risks assessed as ‘high’ and ‘medium’ relating to this report;

<i>Risk</i>	<i>Controls</i>	<i>Consequence</i>	<i>Likelihood</i>	<i>Risk Level</i>
The OEPA do not have confidence in the noise modelling results (based on inputs & assumptions) included in the API-A referral.	Noise modelling has been peer reviewed and the inputs/assumptions kept consistent with the State Government Business Case (i.e Funding Agreement).	Unlikely	Major	High
Future aircraft operations exceed projections resulting in increased aircraft noise exposure.	Review the aircraft traffic projections following negotiations with airlines and commencement of operations.	Possible	Moderate	Medium

**CONSULTATION**

Officers will continue to consult with the OEPA, CASA, AirServices Australia, City of Busselton residents and wider community, airport users and stakeholders throughout the environmental approval process and Airport Development Project.

As part of the API-A referral process the City has performed the following community and stakeholder consultation.

<b>Who</b>	<b>Meeting Forum</b>	<b>Description</b>	<b>Information Provided</b>
Residents in vicinity of the Airport and/or near flight paths	Private meeting either at residents home or at the City offices.	<ul style="list-style-type: none"> <li>• Brief outline of the development project, objectives and infrastructure;</li> <li>• Predicted flight movements;</li> <li>• Predicted noise impacts including ANECs, N-Contours and flight paths</li> </ul>	<ul style="list-style-type: none"> <li>• City’s Noise brochure;</li> <li>• City project Fact sheet;</li> <li>• Information on External websites and agencies for further information.</li> </ul>

		<ul style="list-style-type: none"> <li>Noise Management Plan review</li> </ul>	
Community information sessions	Information session for up to 12 people held at the City offices.	<ul style="list-style-type: none"> <li>Brief outline of the development project, objectives and infrastructure;</li> <li>Predicted flight movements;</li> <li>Predicted noise impacts including ANECs, N-Contours and flight paths</li> <li>Noise Management Plan review</li> </ul>	<ul style="list-style-type: none"> <li>City’s Noise brochure;</li> <li>City project Fact sheet;</li> <li>Information on External websites and agencies for further information.</li> </ul>
Decision Making Agencies (DMAs) engagement	Individual meetings with DMAs – Libby Mettam MLA Dept Of Water Dept Parks and Wildlife Dept of Transport	<ul style="list-style-type: none"> <li>Brief outline of the development project, objectives and infrastructure;</li> <li>Predicted flight movements;</li> <li>Predicted noise impacts including ANECs, N-Contours and flight paths</li> <li>Noise Management Plan review</li> </ul>	<ul style="list-style-type: none"> <li>City’s Noise brochure;</li> <li>City project Fact sheet;</li> <li>Information on External websites and agencies for further information.</li> </ul>
NMP Public Comment	Revised NMP advertised on the City’s Airport website for public comment.	<ul style="list-style-type: none"> <li>Revised NMP showing track changes advertised for 21 days for public comment.</li> </ul>	<ul style="list-style-type: none"> <li>Revised NMP</li> <li>Summary of changes and justification for changes</li> <li>Information on API-a process</li> </ul>

As part of the public consultation relating to the Development Project and understanding aircraft noise management associated with the BMRRR, eighty seven letters were sent out to residential property owners in the vicinity of the airport inviting them to a private meeting. A total of 8 meetings were booked with one resident cancelling prior to the meeting. The majority of feedback received from residents related to questions on flight paths and the possibility of flights late at night as well as asking to be kept informed of updates throughout the project.

Additionally, 1180 letters were sent out to property owners in residential areas approximately within 5km of the airport informing community members of the community information sessions and how to register. The community information sessions were also advertised in the local media. A total of five community sessions were held with between 10 and 14 people attending each session. As with the private meetings the main feedback received from the sessions related to questions on the flight paths and the possibility of flights late at night as well as requesting to be kept informed of updates throughout the project.

Following Council’s consideration of the noise modelling report and noise contours, Officers will place the noise modelling report and noise contours on the BMRRR website and offer community

members to meet with City Officers to discuss any concerns and/or questions relating to the report and contours.

Additionally, City Officers have consulted with Australian Aircraft Noise Ombudsman and sought advice on the noise modelling requirements and resulting contours; and the public consultation process completed to date and planned for the duration of the project to ensure that a comprehensive and appropriate process is being undertaken.

#### **OFFICER COMMENT**

The Busselton-Margaret River Regional Airport (BMRRA) has operated under the authority of the Minister for the Environment, regulated by the Office of the Environmental Protection Authority (OEPA) since the commencement of operations of the then Busselton Regional Airport (BRA) in 1996. As part of the initial BRA project, environmental approvals were sought from the Minister for the Environment for the operations of the Airport. The Ministerial approval for the then BRA resulted in the implementation of Ministerial Statement 399, which incorporated a number of environmental management commitments, including noise management and wetland protection in order to protect the environment. While the City has had amendments approved and implemented to the original Statement 399, and currently operates under Statement 1009, the Airport Development Project represents a significant change to the original proposal submitted to the EPA in 1995 and hence one of the priority approval processes identified for the project is the environmental approval required from the Minister of the Environment; Heritage.

The environmental approvals specifically involve the City of Busselton applying to the Office of Environmental Protection Authority (OEPA) to amend the proposal description that underlies the current Ministerial Statement 1009 and submit a revised NMP that will allow for the proposed interstate air services resulting from the Airport Development Project. Following consultation with the OEPA, an Assessment of Proponent Information-Category A (API-A) is considered the most appropriate assessment application to amend the existing Ministerial Statement and implement a revised NMP.

The API-A referral assessment requires the proponent to consider the EPA's Environmental Assessment Guideline No. 8: Environmental Principles, Factors and Objectives (2013b) to identify the key preliminary environmental factors that may be impacted as part of the Proposal. Consideration of these guidelines has identified the two key environmental factors to be included in the referral;

1. Amenity (aircraft noise);
2. Terrestrial fauna (Vasse-Wonnerup Wetlands).

To demonstrate that the future noise disturbance resulting from the Airport Development Project and future airport operations will not significantly impact on the community, the City has engaged aviation specialist consultants to prepare noise modelling and noise contours that will be included in the API-A referral submitted to the OEPA.

During the preparation of the Airport Business case, the City engaged consultants to prepare noise models and noise contours in order to assess any potential noise impacts from the future airport operations and to inform the business case. However, since the funding announcement the update of the BMRRA Master plan and revised runway infrastructure dimensions, has meant that the noise modelling inputs needed to be updated and the models rerun.

City Officers engaged To70 aviation consultants to prepare the noise modelling and contours. The scope of works included the preparation of ANECs, N contours and LAMax contours. The preparation of multiple noise contour information was seen as necessary to provide a comprehensive representation of the possible future airport operations noise impacts. The ANECs and N contours

will be used to inform future land planning in the vicinity of the airport and the City's Strategic Planning Department are expected to progress a town planning scheme amendment for a revised Airport Special Control Zone to be implemented into the TPS in 2017. The N contours and LAMax's will also be used in the public consultation to inform the community of the potential noise impacts for future BMRRRA operations.

Finally, the ANECs, N contours and LAMax contours will be included in the API-A referral to be submitted to the OEPA as part of the Development Project environmental approvals process. The inclusion of the noise modelling is key in the assessment of the project environmental approvals as they indicate that the impacts from the future airport operations that may result from the Development Project on the surrounding environment (amenity and terrestrial fauna) are not considered significant. The BMRRRA Noise Modelling Report (May 2016) can be viewed in Attachment A.

## **CONCLUSION**

The redevelopment of the Busselton-Margaret River Regional Airport requires environmental approvals are sought from the Office of the Environmental Protection Authority and the Minister for the Environment. Consultation with the OEPA has indicated that an Assessment on Proponent Information - Category A (API-A) referral is the most appropriate process to achieve the approvals which will also need to include the noise modelling report and resulting noise contours.

Following the revision of the BRA Master Plan (2011-2031) and design changes to the runway infrastructure, it was determined that the noise modelling completed in 2014 needed to be updated and rerun. As such, Officers engaged To70 to prepare ANECs, N contours and LAMax contours using the BMRRRA Master Plan (2016-2036) as informing documents to be included in the API-A referral to be submitted to the OEPA and for community consultation with regards to the Development Project.

To ensure the integrity of the noise contours, a peer review of the noise modelling was completed by an independent consultant (GHD) and recommended changes and clarifications have been implemented.

As such, this report presents the Noise Modelling Report (May 2016) prepared by To70 Pty Ltd and noise contours as informing documents to be submitted to the OEPA as part of the API-A referral and community consultation for the BMRRRA Development Project.

## **OPTIONS**

Council may choose not to accept the Officer's recommendation.

## **TIMELINE FOR IMPLEMENTATION OF OFFICER RECOMMENDATION**

The BMRA Noise Modelling Report (May 2016) will be included in the API-A referral expected to be submitted to the OEPA in June 2016 and used as part of the community consultation immediately following Council's endorsement of the report.

## **OFFICER RECOMMENDATION**

That the Council endorses the Busselton-Margaret River Regional Airport Noise Modelling Report (May 2016) prepared by To70 Aviation (Australia) Pty Ltd for inclusion in the API-A referral to be submitted to the Office of the Environmental Protection Authority and community consultation.

Note: Officers noted that the recommendation should read 'community reference' not 'community consultation'. With acceptance from the Committee Officers put forward a revised recommendation.

**Committee Recommendation and Revised Officer Recommendation**

**AIR1606/016** Moved Councillor J McCallum, seconded Deputy C Tarbotton

That the Council endorses the Busselton-Margaret River Regional Airport Noise Modelling Report (May 2016) prepared by To70 Aviation (Australia) Pty Ltd for inclusion in the API-A referral to be submitted to the Office of the Environmental Protection Authority and community reference.

**CARRIED 3/0**

**7. GENERAL DISCUSSION ITEMS**

Nil

**8. NEXT MEETING DATE**

Wednesday, 27 July 2016

**9. CLOSURE**

The meeting closed at 11.33am.

THESE MINUTES CONSISTING OF PAGES 1 TO 12 WERE CONFIRMED AS A TRUE AND CORRECT RECORD ON WEDNESDAY, 27 JULY 2016.

DATE: \_\_\_\_\_

PRESIDING MEMBER: \_\_\_\_\_