

COUNCIL ASSESSMENT REPORT

Panel Reference	2017STH027
DA Number	2017.445
LGA	Bega Valley Shire Council
Proposed Development	Recreational Flight School
Street Address	1070 Princes Highway, Frogs Hollow
Applicant/Owner	Sports Aviation Flight College Australia C/- Norm Boyle Consulting
Date of DA lodgement	26 October 2017
Number of Submissions	725 submissions and 3 petitions
Recommendation	Refusal
Regional Development Criteria (Schedule 4A of the EP&A Act)	Development that has a capital investment value of more than \$5 million for any of the following purposes: (a) air transport facilities,
List of all relevant s79C(1)(a) matters	• Environmental Planning and Assessment Regulation 2000 • State Environmental Planning Policy (State and Regional Development) 2011 • State Environmental Planning Policy (Infrastructure) 2007 • State Environmental Planning Policy No 33 – Hazardous and Offensive Development • State Environmental Planning Policy No 44 – Koala Habitat Protection • State Environmental Planning Policy No 55 – Remediation of Land • Bega Valley Local Environmental Plan 2013
List all documents submitted with this report for the Panel's consideration	Appendix 1 – Section 4.15 (previously 79C) Assessment Report Appendix 2 – Referrals from External Agencies Appendix 3 – Advice from Marshall Day Acoustics Appendix 4 – Referrals from Merimbula, Moruya and Mallacoota Airport Owners/Operators Appendix 5 – Summary of Submissions Appendix 6 – Further information letter 15 November 2017 Appendix 7 – NGH Cover Letter and Statement of Environmental Effects Addendum Appendix 8 – Letter to Council 18 October 2018 (addressing the proposed use of other airports, potential for prohibitions on flight training, circuit training component, flight schedule and travel time to nominated airports, progressive staging of flight movements, flight movements at nominated airports, prevailing wind conditions) Appendix 9 – Onsite Wastewater Management Plan Amendment 2 (14 October 2018) Appendix 10 – Air Quality Assessment Appendix 11 – Applicant's Response to Submissions Appendix 12 – Flight Paths Appendix 13 – Operational Wind Conditions at Frogs Hollow Airfield Appendix 14 – Visual Impact Assessment Appendix 15 – Preliminary Site Investigation: Potential contamination of land

	Appendix 16 – Intersection Design Plans Revision B Appendix 17 – Intersection Design Report Issue C Appendix 18 – Visual Distraction over Princes Highway Assessment
Report prepared by	Anna Bowman, Town Planner, Bega Valley Shire Council
Report date	29 November 2018

Summary of s4.15 matters

Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report? **Yes**

Legislative clauses requiring consent authority satisfaction

Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report? **Yes**

e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP

Clause 4.6 Exceptions to development standards

If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report? **Not Applicable**

Special Infrastructure Contributions

Does the DA require Special Infrastructure Contributions conditions (S94EF)? **Not Applicable**

Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions

Conditions

Have draft conditions been provided to the applicant for comment? **No**

Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the assessment report

Abbreviations

EP&A Act	Environmental Planning & Assessment Act 1979 (as amended)
EP&A Reg	Environmental Planning & Assessment Regulation 2000
SEPP	State Environmental Planning Policy
ISEPP	State Environmental Planning Policy (Infrastructure) 2007
BVLEP	Bega Valley Local Environmental Plan 2013
BCA	Building Code of Australia
NSW DPI	New South Wales Department of Primary Industries
NSW EPA	New South Wales Environment Protection Authority
NSW OEH	New South Wales Office of Environment and Heritage
NSW RFS	New South Wales Rural Fire Service
NSW RMS	New South Wales Roads and Maritime Services
DIRDC	Commonwealth Department of Infrastructure, Regional Development and Cities
CASA	Civil Aviation Safety Authority
RAA	Recreational Aviation Australia
JRPP	Joint Regional Planning Panel
BVSC	Bega Valley Shire Council
SOEE	Statement of Environmental Effects
EEC	Endangered Ecological Community
NASF	National Airports Safeguarding Framework
dB(A)	A-weighted decibels
$L_{Aeq, \text{period}}$	The equivalent continuous (energy average) A-weighted sound pressure level of the source over a period of time
$L_{Aeq, 15 \text{ minute}}$	The equivalent continuous (energy average) A-weighted sound pressure level of the source over 15 minutes
$L_{Aeq, 24 \text{ hours}}$	The equivalent continuous (energy average) A-weighted sound pressure level of the source over 24 hours
L_{Amax}	The maximum sound pressure level of an event measured with a sound level meter satisfying AS IEC 61672.1-2004 set to 'A' frequency weighting and fast time weighting
RBL	Rating background level
HB 149 2016	Standards Australia Hand Book: Acoustics - Guidance on producing information

	on aircraft noise
ANEF	Australian Noise Exposure Forecast
AS 2021	Australian Standard: Acoustics – Aircraft noise intrusion – Building siting and construction
CAAP 92-1(1)	Civil Aviation Advisory Publication: Guidelines for Aeroplane Landing Areas
ALA	Aeroplane Landing Area
RPT	Regular Public Transport service
MTOW	Maximum Take-Off Weight
VMC	Visual Meteorological Conditions
LSA	Light Sport Aircraft
POH	Pilot's Operating Handbook (synonymous with Aircraft Operating Instruction (AOI))
ICAO	International Civil Aviation Organization
CAR	Civil Aviation Regulation
CAO	Civil Aviation Order

Explanation of Terms

Bega Valley Shire Council

Reference in the report to Bega Valley Shire Council refers to the elected Councillors

Council

Reference in the report to Council refers to Council's Assessing Officers

Terms relating to noise

Decibel (dB)

A measure of sound level. The decibel is a logarithmic way of describing a ratio. The ratio may be power, sound pressure, voltage, intensity or other parameters. In the case of sound pressure, it is equivalent to 10 times the logarithm (to base 10) of the ratio of a given sound pressure squared to a reference sound pressure squared (NSW EPA, 2017).

A - Weighted Decibels (dB(A))

Unit used to measure 'A-weighted' sound pressure levels. A-weighting is an adjustment made to sound-level measurement to approximate the response of the human ear (NSW EPA, 2017).

Ambient Noise

The all-encompassing noise associated within a given environment. It is the composite of sounds from many sources, both near and far (NSW EPA, 2017).

Background Noise

The underlying level of noise present in the ambient noise, excluding the noise source under investigation, when extraneous noise is removed. This is described using the L_{AF90} descriptor (NSW EPA, 2017).

Fast time weighting

Most sound level meters have two exponential time weightings, F = Fast and S = Slow with time constants of 125ms and 1000ms respectively (Gracey, 2018).

$L_{AF90, 15min}$ dB

The A-weighted sound pressure level measured using fast time weighting that is exceeded for 90% of the time over a 15-minute assessment period. This is a measure of background noise (NSW EPA, 2017).

$L_{Aeq, T}$

The time-averaged sound pressure level. The value of the A-weighted sound pressure level of a continuous steady sound that, with a measurement time interval T, has the same mean square sound pressure level as a sound under consideration with a level that varies with time (AS1055.1-1997) (NSW EPA, 2017).

Noise-sensitive land uses

Land uses that are sensitive to noise, such as residential areas, churches, schools and recreation areas (NSW EPA, 2017).

Noise-sensitive location(s)

Residential premises, schools, hospitals, places of worship, parks and wilderness areas (NSW EPA, 2000).

Receiver

The noise-sensitive land use at which noise from a development can be heard (NSW EPA, 2017).

Temperature Inversion

An atmospheric condition in which temperature increases with height above the ground (NSW EPA, 2017).

Greenfield site

Undeveloped land (NSW EPA, 2017).

Terms relating to aviation**Aircraft movement**

A take-off or a landing.

Recreational Aviation Australia

Formerly known as the Australian Ultralight Federation, Recreational Aviation Australia (RAAus) is the peak body in Australia responsible for administering ultralight, recreational and Light Sport Aircraft (LSA) operations.

RAAus are one of nine Recreational Aviation Administration Organisations (RAAOs) authorised to self-administer sport and recreational flying activities on behalf of the Commonwealth Government's Civil Aviation Safety Authority. Since The Civil Aviation Regulations 1988 don't regulate this class of aircraft or activities, RAAus operates via exemptions and delegations ("Our organisation - RAAus", 2018).

Recreational Pilot Certificate (RPC)

A Recreational Pilot Certificate allows you to:

- Fly a two seat recreational registered aircraft in uncontrolled airspace during daylight hours within 25 nautical mile of your departure aerodrome.
- Use a Driver Licence self-declared health standard.
- Take a passenger when endorsed to do so.
- Fly further in uncontrolled airspace with an additional Navigation endorsement.
- Fly in good weather conditions (VMC)

Visual Meteorological Conditions

An aviation flight category in which visual flight rules (VFR) flight is permitted—that is, conditions in which pilots have sufficient visibility to fly the aircraft maintaining visual separation from terrain and other aircraft.

Flight training circuit

Circuit training is the first stage of practical pilot training focused on take-offs and landings. It involves the pilot making approaches to the runway, touching down and then applying power to take off again.

A training circuit consists of five legs – the take-off, crosswind, downwind, base and final approach to the runway. See figure 1. Figure 1 depicts a left hand circuit with the aircraft turning left after take-off and flying anticlockwise. This is the most common type of circuit operation (Airservices Australia, 2016).

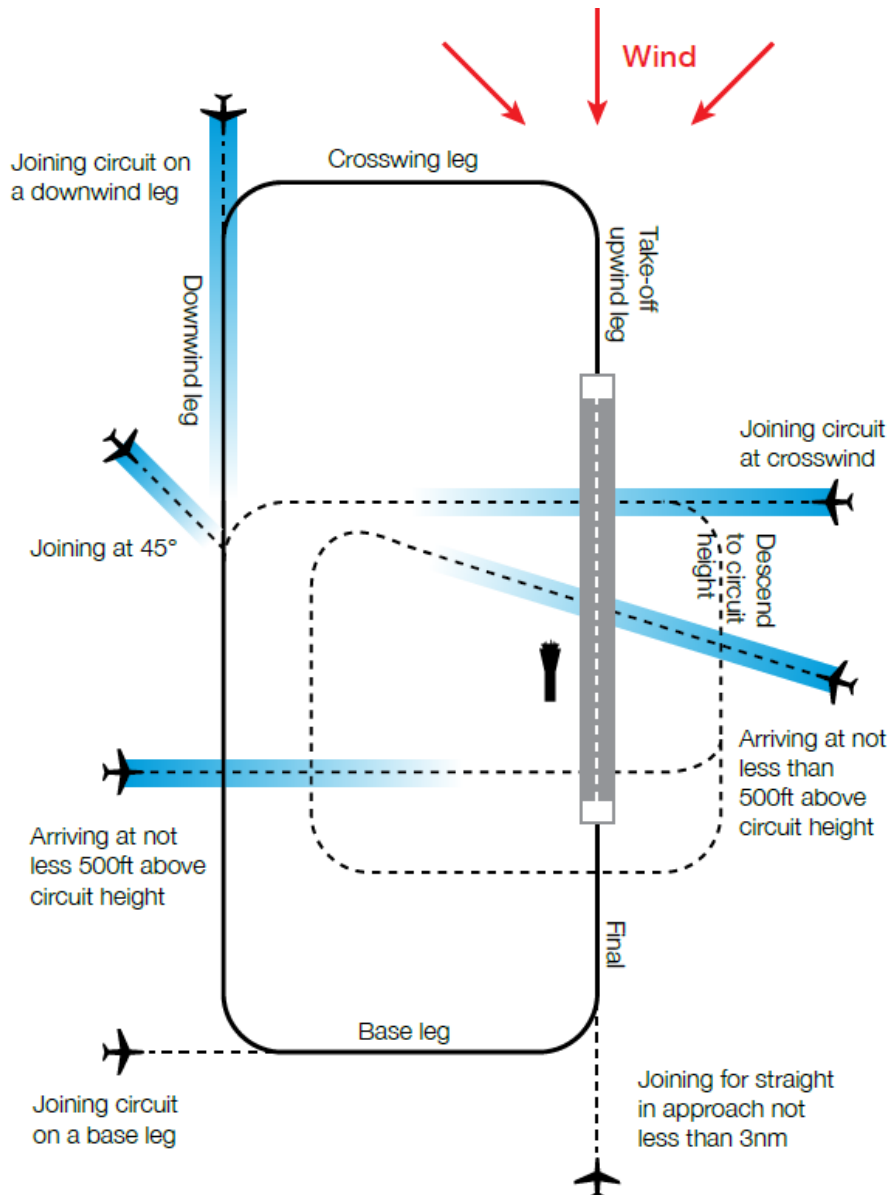


Figure 1: Training circuit

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ASSESSMENT REPORT AND RECOMMENDATION

1.0 EXECUTIVE SUMMARY

The application proposes a recreational flight school at an existing Aeroplane Landing Area (ALA) located at Frogs Hollow in the Bega Valley.

The proposed recreational flight school would generate a significant increase in flights and activities at the site which is predominately set within a rural and rural residential environment.

Council has undertaken a detailed assessment of the application in accordance with Section 4.15 Matters for consideration-general of the Environmental Planning and Assessment Act 1979 (as amended). The application was referred to a range of external agencies for comment. General terms of approval were provided from NSW Rural Fire Service. Council sought legal advice regarding permissibility and independent advice from Marshall Day Acoustics with regard to the likely noise impacts of the development.

Matters that have been adequately addressed include permissibility, potential pollution impacts and visual impact of the development to the Princes Highway. Council considers that suitable mitigation measures could be applied in relation to water supply for fire-fighting purposes, landscaping, waste management, noise impacts internal to the site, noise from ground based operations, and remediation of potentially contaminated land.

Matters that remain unresolved include:

- Noise impacts on the locality and broader region
- Social and economic impacts
- Aboriginal archeology
- Biodiversity
- Effluent disposal
- Compliance with CASA's publication CAAP 92-1 (1)
- Inconsistency with environmental planning instruments and Bega Valley Development Control Plan 2013
- Reliance upon the use of other airports to satisfy flight training requirements
- At the time of completion of the assessment, concurrence from NSW Roads and Maritime Services had not been received.

During the assessment 725 submissions were received, which included 720 letters against, 4 in favour of the proposal and one neutral response. A further 3 petitions were received objecting to the application. The submissions raised concern with a broad range of issues, including several matters of relevance to the assessment of this application, being:

- Noise and amenity impacts at Frogs Hollow, Merimbula, Moruya and Mallacoota,
- Insufficient information to identify all impacts associated with the proposed flight school,
- Impacts on biodiversity at the site, especially identified Endangered Ecological Community - Lowland Grassy Woodland,

- Incompatibility of the use with the rural, semi-rural character of Frogs Hollow and the surrounding areas having regard to land-use conflicts, existing character, suitability and overdevelopment of the site,
- Visual impacts, and
- The adverse socio-economic impacts on residents and businesses located in the Frogs Hollow locality, within the designated training area (25Nm radius), in the Bega Valley and beyond the extent of the Bega Valley Shire to Moruya and Mallacoota.

Therefore, in this instance the precautionary principle applies, and the application is recommended for refusal.

2.0 INTRODUCTION

Council is in receipt of a development application for a recreational flight school at Lot 1 DP 109606 and Lot 1 DP 245789 - 1070 Princes Highway, Frogs Hollow.

The proposal has been lodged by Norm Boyle Consulting Services on behalf of Sports Aviation Flight College Australia.

Development consent is sought under Part 4 of the Environmental Planning and Assessment Act 1979. The applicant has defined the proposal as an airport (a type of air transport facility) and it has a capital investment value of \$10,450,000. The Joint Regional Planning Panel – Southern Region (JRPP) is the determining authority.

Chronology of Events

Mr Norm Boyle undertook a pre-lodgement meeting with Council's Development Advisory Panel on 30 October 2014.

A development application was lodged by Sports Aviation Flight College Australia C/- Norm Boyle Consulting Services on 26 October 2017.

Council advertised and notified the application in accordance with the Environmental Planning and Assessment Regulation 2000 and received 462 submissions (461 against) and three petitions against the proposal. A further submission from Bega Valley Shire Council was submitted directly to the JRPP.

A preliminary review of the application was undertaken, whereupon Council Officers requested further information from the applicant, including further detail in relation to:

- the flight training component,
- proposed use of other airports for circuit training,
- inadequacy of the noise assessment report,
- water supply quality assurance,
- pollution from exhaust emissions,
- on site sewerage management system,
- accessible toilets,
- impacts upon the natural environment,
- estimated traffic volumes,
- inclusion of the access road as part of the application,
- intersection treatment to Princes Highway,
- consideration of CASA's advisory publication CAAP 92-1 (1),
- required provision of a Socio-Economic Impact Assessment,
- required provision of a Sustainable Design Management Plan, and
- preliminary hydraulic assessment.

Council Officers conducted a site inspection and briefing with the Joint Regional Planning Panel (JRPP) on 7 February 2018. The Panel raised legal and merit-based questions. Further information was requested from the applicant including:

- history of the site,
- whether the application is “designated development”,
- provision of a locality plan detailing all houses and parcels of land with dwelling entitlements within 2kms of the site,
- surface construction of the runway and impact of surface irrigation upon it,
- required legal length of the runways for proposed aircraft types,
- extent of Asset Protection Zones,
- full extent of proposed clearing,
- provision of a vegetation management plan,
- proposed location of relocated Frogs Hollow Flyers buildings,
- visual impact assessment,
- a lighting plan,
- impacts of night lighting upon flora and fauna,
- estimates of water deficit based on rainfall “range” and likely truck movements for water cartage,
- operations management plan,
- a locality plan detailing any obstructions to navigation,
- detail regarding existing fuel storage on site,
- letters of agreement from the other airfields detailing that those facilities can cater for the proposed flight circuit training,
- consideration of the cumulative impact of noise from the Go-Kart track and Frogs Hollow Flyers.

Subsequently the applicant lodged a Statement of Environmental Effects (SOEE) Addendum in response to the further information requests.

Council advertised the SOEE Addendum whereupon a further 263 submissions were received (with 259 submissions against the proposal).

A public meeting was held by the JRPP at the Bega Civic Centre Auditorium on 29 August 2018. 42 people addressed the panel detailing their objections to the proposal.

Post the public meeting, further information was received by Council, including the following:

- NGH Response regarding use of other airports, and quantity of circuit training proposed per stage
- Visual Impact Assessment

- Operational Wind Conditions
- Flight Paths
- Response to submissions
- Air Quality Assessment
- Fast-Fact Water Supply for Fire Fighting Purposes
- On-Site Sewerage Management Addendum
- Preliminary Site Investigation: Potential contamination of land
- Intersection Design Plans Revision B
- Intersection Design Report Issue C
- Visual Distraction over Princes Highway Assessment

The above reports are included as Appendices to this report.

The application is integrated development and was subsequently referred to NSW Roads and Maritime Services for concurrence, and NSW Rural Fire Service seeking general terms of approval. The NSW Rural Fire Service has provided their General Terms of Approval.

Under Schedule 3 of SEPP (Infrastructure) 2007, concurrence is required from NSW Roads and Maritime Services. At the time of reporting to the JRPP determination meeting, concurrence remained an outstanding matter. If received prior to determination, it will be included as a late attachment to the report.

The application was referred to the following external agencies:

- Civil Aviation Safety Authority (CASA)
- Airservices Australia
- Recreational Aviation Australia (RAA)
- NSW Roads and Maritime Services (RMS)
- NSW Rural Fire Service (RFS)
- NSW Office of Environment and Heritage (OEH)
- NSW Environment Protection Authority (EPA)
- NSW Health
- NSW Department of Primary Industries (DPI)
- NBN Co.
- Australian Government Department of Infrastructure, Regional Development and Cities
- Bega Local Aboriginal Land Council
- Bega Valley Shire Council (as Merimbula Airport owner)
- East Gippsland Shire Council (as Mallacoota Airport owner)

- Eurobodalla Shire Council (as Moruya Airport owner)
- Snowy Monaro Regional Council (as Bombala Airport owner)

Copies of the agency referrals are included in Appendix 2 to this report.

Additionally, Council sought independent acoustical advice from Marshall Day Acoustics in relation to the noise assessment reports submitted by the applicant. The advice provided to Council is included as Appendix 3 to this report.

3.0 DESCRIPTION OF THE SITE

The subject site is described as Lot 1 DP 109606 and Lot 1 DP 245789; 1070 Princes Highway, Frogs Hollow.

The site is located in the Bega Valley, with the nearest towns being Bega (9.7km to the Bega CBD), Wolumla (7.5km to the town centre) and Candelo (approximately 9.2km to the town centre). Bournda National Park and Nature Reserve sits to the east.



Figure 2: Lot 1 DP 109606, 1070 Princes Hwy FROGS HOLLOW

The subject site is an irregular T-shape of approximately 39.692ha. The T-shape generally reflects the alignment of the existing North-South and East-West airstrip runways. The site is located between the Princes Highway and the Wolumla Creek. Vehicular access is provided from the Princes Highway via Lot 1 DP 245789 which also provides access to the Go Kart track on adjacent Lot 1 DP 1101320. The access road traverses a gully treated with a concrete slipway. The site is gently undulating with the runways located on the highest part of the land. The land is mostly cleared with some remnant Endangered Ecological Community (EEC) Lowland Grassy Woodland located at the south-eastern corner of the site. The remainder of the mostly cleared land is a mixture of native and invasive grasses, legumes and herbs cropped short by grazing cattle.

Existing development on the site consists of seven buildings comprising two club rooms, four hangars, a shed, three shade structures, one water tank and a windsock.

Two community groups currently use the site; the Frogs Hollow Flyers (a recreational flying club) and the Bega District Model Club (a radio control model plane club).

Nearby surrounding land uses include:

- a go-kart track immediately to the east;
- sheep and cattle grazing farmland,
- the Princes Highway 280-400m to the east of the site;
- rural residential lots, with a concentration of newly developed small concessional lots to the east and south-east of the site;
- approved concessional lot subdivisions to the north and the west of the site (commenced but not constructed),
- several small-scale business and home-based businesses including caravan manufacturing, and

Land uses further from the airfield but less than 3 kilometres away include:

- Shipton's dairy,
- the NBN Co. Satellite Earth Station, and
- the Wanatta Lane Central Waste Facility.

The south western part of the site is mapped as being bush fire prone.

Currently, the site is utilised as an airfield with usage estimated at approximately 30 aircraft movements per week, with a movement meaning either a take-off or a landing. Cattle currently graze the land, including the runways.

4.0 DESCRIPTION OF PROPOSAL

It is proposed to establish a recreational flight school at the existing Aeroplane Landing Area (ALA) at Frogs Hollow.

The flight school is proposed to cater for a Chinese market offering an all-inclusive training and accommodation package complete with flights to-and-from China, on-site meals and weekly recreational excursions in the region. The students would undertake flight training in Light Sport Aircraft (LSA) (also known as an Ultralight or Microlight) which encompasses the LSA categories of “Three Axis” and “Weight Shift: Trike” with a Maximum Take-Off Weight (MTOW) of 600kg. The nominated LSA are the Bantam B22 and the Trike. It is proposed that both aircraft types would be fitted with a Rotax Type 912/80hp (UL/AF) engine.



Figure 3: Bantam three axis aircraft



Figure 4: Trike weight-shift aircraft

It is intended that the students would live on-site while studying and training to achieve a Recreational Pilots Certificate (RPC) to operate a Light Sport Aircraft.

The proposed recreational flight school would include the following elements, to be constructed in nine stages over a period of up to five years (see Appendix 7A):

- Main building x 1 comprising kitchen, communal dining area, offices, storage area and communal toilets
- Workshop buildings x 2
- Hangar buildings x 20
- Single storey squadron compounds x 10 (comprised of 3 x 12 room student accommodation buildings, 3 x classrooms, 1 x communal area, 1 x laundry building and 1 x utility area)
- Single storey carpark building
- Access road and internal roads
- New bridge
- Underground walkway
- Water Storage Tanks
- Fuel Storage Tanks
- On site sewerage management system.

At full operation (completion of Stage 9) the school would cater for a maximum of 360 students per 12 week period, with a total of 1200 students per year, employ approximately 201 FTE staff and would utilise 40 aircraft.

Hours of operation are proposed to be 7am to 6pm Monday to Saturday. It is noted that practical flight training can only occur during daylight hours. It is proposed that flight training would be limited to weekdays (Monday to Friday) with limited remedial training on Saturdays.

It is intended that flight training would occur from February to November, with no flight training occurring in December and January. Flight training is proposed to be undertaken on 150 days per year. Additional remedial training would occur on Saturdays.

The course curriculum would require that each student undertake 400+ hours of ground-based classroom studies and on average 30 hours of flight training in order to sit for the Recreational Pilots Certificate. The 30 hours of flight training would be broken up into 2 hours per day per student over 15 days. As part of the flight training, students would be required to perform approximately 60-80 dedicated flight training circuits to perfect take-off and landing techniques. (NB. Advice received from the applicant initially outlined that approximately 80 flight circuits would be required to be flown by each student to achieve competency (see Appendix 6), however subsequent information received 18 October 2018 has revised the estimate down by 25% to approximately 60 designated flight circuits per student (see Appendix 8).

It is proposed that training circuits would be carried out at other airfields by agreement (Appendix 6). The other airfields nominated for use are Merimbula, Mallacoota, Moruya, Cooma Snowy Mountains, Bombala and Polo Flat. Based upon the applicant's estimate of 60 flight circuits per student, at completion of Stage 9 it is proposed that flight training circuits would be flown at these airports as follows:

Airport	No. of circuits per flying day	No. of flying days per 30 day period
Moruya	240	Six days
Merimbula	96	Ten days
Mallacoota	96	Ten days
Bombala	96	Ten days
Cooma Snowy Mountains	96	Ten days
Polo Flat	96	Ten days

Table 1: Stage 9 proposed circuit training at other airports

It is proposed that the circuits would be flown over three sessions per flying day (excepting at Moruya) i.e. 3 sessions of 32 circuits per flying day.

The applicant proposes that “In some instances, flight training may be compressed for some of the more distant airports such as Moruya” (letter to Council dated 18 October 2018), and that for Moruya up to 240 circuits per flying day could be flown. This would occur six out of each 30 day period. It is proposed that eight students would fly to Moruya accompanied by an instructor, and another 16 students would travel to Moruya by bus. Once at Moruya Airport, each student would each fly ten circuits each.

In addition to other nominated airfields, flight circuit training is proposed to be undertaken at Frogs Hollow at the following quantities per stage. Note: Flight circuit training will commence at other airports in Stage 4)

Stage	Number of circuits per flying day (150 flying days per year)
1	96
2	144
3	192
4	60 (circuit training commences at other airports)
5	72
6	84
7	77
8	87
9	96

Table 2: Flight circuits proposed to be flown at each stage at Frogs Hollow

It is intended that the flight school would utilise both existing runways and would therefore utilise four designated flight circuits; 09, 18, 27 and 36, in accordance with Figures 4 and 5. A circuit is an essential part of pilot training. Typically, a circuit is made up of the following steps:

- Take off into the wind and climb to 500 feet above ground level (AGL)
- Turn left and continue climb to 1000 feet AGL

- Turn left and fly downwind at 1000 feet AGL
- Turn left and commence descent to approximately 500 feet
- Turn left (final) and descend to runway (touch and go, or full stop).

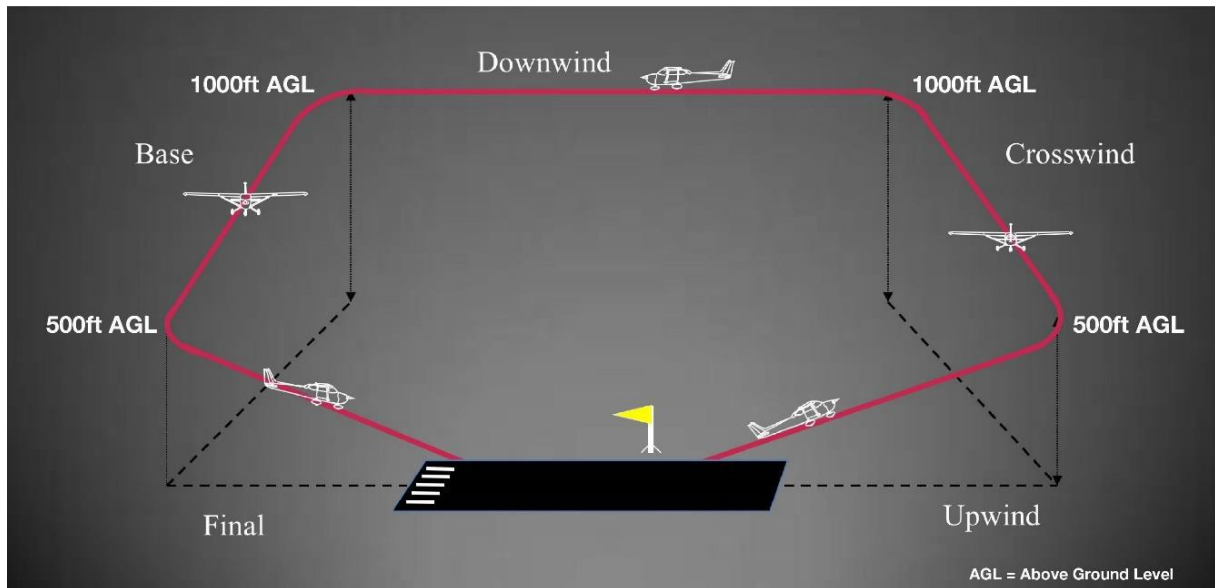


Figure 5: Designated flight circuit profile

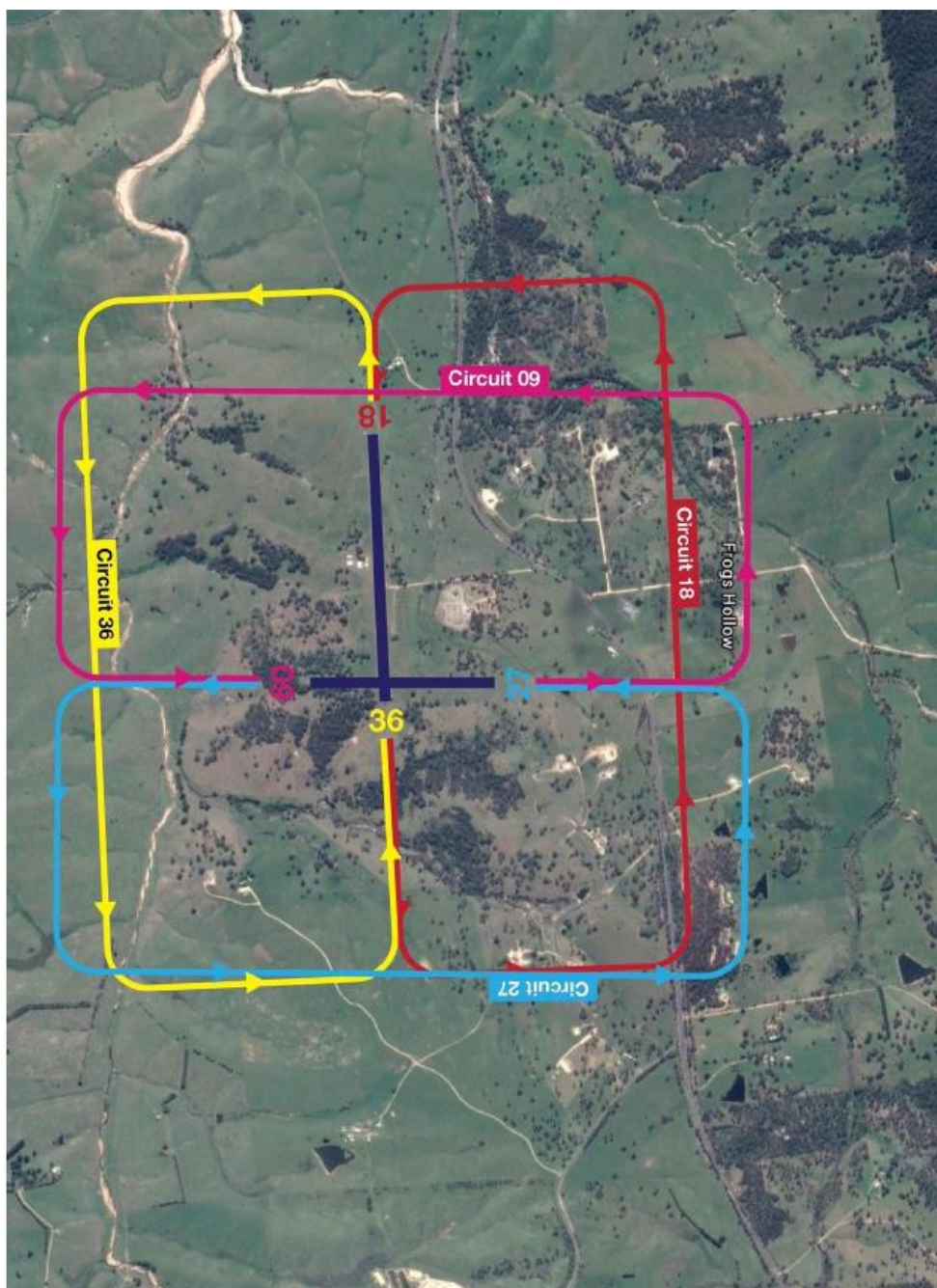


Figure 6: Designated flight circuits 09, 18, 27 and 36

The proposed recreational flight school has been tabled below for context of scale.

Table 3: Comparative scale to major training airports

Airport	Total annual recorded movements (2017)
Moorabbin	294,406*
Bankstown	247,506*
Parafield	199,658*
Camden	109,906*

Tamworth	77,426*
Essendon	52,868*
Frogs Hollow - Stage 3	Proposed to be 72,000 at Frogs Hollow at Stage 3
Frogs Hollow – Stage 9	Proposed to be ~64,800 at Frogs Hollow at Stage 9 with reliance upon six other airfields to make up the balance of a further 124,800 movements (based upon each student undertaking 60 dedicated flight training circuits) <u>Assumptions:</u> 96 circuits x 2 (two movements per circuit) per flying day + 240 flight movements per flying day (take-offs and landings) = 432 movements per flying day 432 movements x 150 days per year = 64,800 movements per year

* Airservices Australia, Movements at Australian Airports – Cal YTD, 2017 Calendar Totals

5.0 PLANNING ASSESSMENT

The proposal has been assessed in accordance with the Matters for Consideration under Section 79C (now Section 4.15) of the Environmental Planning and Assessment Act 1979 (reference full assessment in Appendix 1 – Section 4.15 (previously S 79C) Assessment).

Section 4.15(1)(a)(i) any environmental planning instrument

The development application has been assessed in accordance with the following;

- Environmental Planning and Assessment Regulation 2000
- State Environmental Planning Policy (State and Regional Development) 2011
- State Environmental Planning Policy No 33 – Hazardous and Offensive Development
- State Environmental Planning Policy No 44 – Koala Habitat Protection
- State Environmental Planning Policy No 55 – Remediation of Land
- State Environmental Planning Policy (Infrastructure) 2007
- Bega Valley Local Environmental Plan 2013

Environmental Planning and Assessment Regulation 2000

Schedule 3 Designated development

Consideration of Schedule 2 Designated development is required for aircraft facilities. Consideration must be given to environmental impact and proximity to residential zones, schools and hospitals. The airfield is not located within 5kms of these sensitive uses. The proposal is not designated development.

SEPP (State and Regional Development) 2011

The proposal has a capital investment value of more than \$5 million and is defined as an “airport” (which is a type of “air transport facility”) and therefore it is Regionally Significant Development and the Joint Regional Planning Panel is the consent authority.

SEPP 33 – Hazardous and offensive development

The SEPP 33 assessment was undertaken in consultation with the guidelines (Jan 2011). The development is not defined as an “industry” or “industrial activity”, however the development is broadly defined as an air transport facility which can be broken down into smaller elements including a “storage premises”, specifically with regard to the storage of fuel. Therefore further consideration of SEPP 33 is required.

Potentially hazardous industry:

- The proposal to store 60,000L more than 10m from the lot boundary falls below the screening threshold.
- The proposed weekly and annual transportation movements (2 and 50 respectively) fall below the threshold.

Potentially offensive industry:

- The SEPP defines a potentially offensive industry as follows:

potentially offensive industry means a development for the purposes of an industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would emit a polluting discharge (including for example, noise) in a manner which would have a significant

adverse impact in the locality or on the existing or likely future development on other land, and includes an offensive industry and an offensive storage establishment.

- Given that aeroplanes taking-off and flying training circuits may create significant noise, particularly with regard to the proposed intensity of operations at the subject site (i.e. In excess of 240 flight movements per flying day at Stage 9), the development is considered to be a potentially offensive industry.
- The proposal does not trigger an EPA license under the POEO Act, however it is noted that no airport or aerodrome facilities trigger an EPA license under the POEO Act, excepting for helicopter-related activities.
- The application was supported by a noise assessment report which states that the test aircraft engine noise was not discernible from the Noise Catchment Area locations during taxiing. However, the acceptability of aircraft noise during take-off and the flying of training circuits has not been demonstrated. The noise assessment report was subject to scrutiny by an independent noise consultant regarding its adequacy, and determined to be insufficient to determine the extent of the impact, and therefore insufficient to determine the acceptability of the noise impact.

Therefore it has not been adequately demonstrated that it is not offensive.

SEPP 44 – Koala Protection

The site retains trees that are identified as secondary feed trees. Inspections of the site and its proximity to known koala populations have identified no impacts.

SEPP 55 (Remediation of Land)

The site has been used as a landing ground for airplanes since 1937. Under Table 2 of the Contaminated Land Planning Guidelines an airport is listed as a contaminating use with hydrocarbons and metals as potential contaminants. The SOEE Addendum details that currently "...approximately 1,000L of fuel, including Aviation Gasoline (avgas), is currently stored at the Frogs Hollow airfield. This is currently stored in unprotected, un-bunded steel drums". Council notes the potential for fuel to have been spilled on the site.

The applicant undertook a Preliminary Site Investigation (PSI). The report noted the likelihood of contamination across the site is considered to be low, although some highly localised areas have a low to moderate likelihood that contamination may be present. The report details "...it was reported to Coffey that only small quantities of fuels, lubricants, aviation hydraulic fluids were known to be used (i.e. stored/used in 5L to 20L containers)..." which is noted to be inconsistent with the advice provided in the SOEE Addendum.

The report concludes that based on the findings of the assessment the likelihood of contamination being present across the site that would preclude development is generally low. However given that the proposed development includes accommodation facilities it is recommended that further assessment should be completed.

Conclusion

Council considers that if the land is contaminated it can be adequately identified and remediated prior to use through appropriate conditions of consent.

SEPP (Infrastructure) 2007

The land is zoned SP2 Infrastructure for the purpose of an air transport facility and RU1 Primary Production under the Bega Valley Local Environmental Plan 2013. The land use tables indicate that

roads and an air transport facility are permitted with consent, in addition to any development that is ordinarily incidental or ancillary to development for that purpose.

The proponent seeks to develop:

- class rooms,
- hangars and workshops for aircraft storage and maintenance,
- kitchen and communal dining area,
- student accommodation,
- offices, storage, amenities, car park and supporting infrastructure.

The SEPP (Infrastructure) 2007 defines an airport as follows:

airport means a place used for the landing, taking off, parking, maintenance or repair of aeroplanes (including associated buildings, installations, facilities and movement areas and any heliport that is part of the airport).

An air transport facility is defined as follows:

air transport facility means an airport, or a heliport that is not part of an airport, and includes associated communication and air traffic control facilities or structures.

Therefore an air transport facility is an airport. The subject site is considered to be best defined as an airport, given that it has more than one runway and approved hangars on site.

Clause 23 of the SEPP (Infrastructure) 2007 (ISEPP) provides that:

23 Development permitted with consent

Development for any of the following purposes may be carried out with consent on land within the boundaries of an existing air transport facility if the development is ancillary to the air transport facility:

- (a) *passenger transport facilities,*
- (b) *facilities for the receipt, forwarding or storage of freight,*
- (c) *hangars for aircraft storage or maintenance,*
- (d) *commercial premises,*
- (e) *industries,*
- (f) *recreation areas, recreation facilities (indoor) or recreation facilities (outdoor),*
- (g) *residential accommodation,*
- (h) *tourist and visitor accommodation.*

Council sought legal advice from Senior Counsel to determine whether the proposed land use was permissible. Council was advised that the land use is permissible subject to development consent.

Therefore the proposed recreational flight school and proposed ancillary elements are considered to be permitted with consent under the provisions of the SEPP (Infrastructure) 2007.

Under Schedule 3 of the ISEPP, an airport requires referral to RMS regardless of size or capacity and the application was referred to NSW RMS for concurrence. At the time of completion of the assessment, concurrence of NSW RMS had not been obtained.

Conclusion

The proposed land use and ancillary land uses are permitted with consent. At the time of completion of the assessment, concurrence of NSW RMS had not been obtained.

Bega Valley Local Environmental Plan 2013

The following provisions apply:

- Clause 1.2: Aims of Plan
- Clause 2.3 Zone objectives and Land Use Table
- Clause 4.3 Height of buildings
- Clause 6.2 Earthworks
- Clause 6.5 Terrestrial biodiversity
- Clause 6.6 Riparian land and watercourses
- Clause 6.8 Airspace operations

1.2 Aims of Plan

The applicant lodged a Socio-Economic Impact Assessment report which claims that the development aligns strongly with item (2)b "...in that it will provide employment for an estimated 200 people in a tourist enterprise responding to emerging markets in China".

The applicant detailed in the Statement of Environmental Effects, "It is considered that the proposed recreational flight school is consistent with the aims of the plan given the proposal will contribute to the social welfare of the Bega community whilst accommodating a productive, sustainable economic activity in the zone. The proposed development will facilitate the establishment of a development that is consistent with the principles of the plan".

A review of the aims has been undertaken and is detailed herewith:

(a) To protect and improve the economic, natural and social resources of Bega Valley through the principles of ecologically sustainable development, including conservation of biodiversity, energy efficiency and taking into account projected changes as a result of climate change,

A key aspect of the proposal is the potential to increase employment opportunities within the Bega Valley Shire by up to 201 Full Time Equivalent (FTE) positions as the development expands, and therefore contribute to the economic and social resources of the Bega Valley. The applicant claims that the development would showcase the Bega Valley to the Chinese tourism market which would have the effect of increasing the number of Chinese tourists visiting the region, such as when the families of the students came to visit. The proposal was supported with a Socio-Economic Impact Assessment report (SIA) to substantiate these claims and consider the potential negative impacts of the development.

The SIA promoted a favourable outcome from the development proceeding, however it is noted that negative externalities (such as noise impacts and subsequent health impacts in the immediate locality) are assumed to be satisfactory (within acceptable thresholds) based upon the claims made in the noise assessment report undertaken by Renzo Tonin & Associates. Council does not support these

claims, given an independent review of the noise assessment report reveals that the methodology and criterion are inappropriate for the development type and site, and information provided to describe the likely noise impacts from the development is inadequate to allow proper assessment.

Further, the SIA is built on a Cost Benefit Analysis (CBA) that is for a different sector (transport) and is not appropriate for the sector (education) that the proposal relates to. As such, the cost benefit analysis calculated and arguments that are based from it should not be relied to be accurate for the proposal.

Negative externalities are likely to be undervalued or are unquantifiable in the SIA. This is problematic as the proposed activities of the Flight School rely on creating these externalities throughout the entire period of its operation.

The proposal's assumptions concerning employment impacts with regards to tourism does not utilise the accepted approach as to how the overall benefits of tourism and the 'visitor economy' are recorded in the Shire. To this end the proposal undervalues the impact on the tourism and visitor economy. The SIA assertion that the current branding of the Shire is 'questionable' in its efficacy is inaccurate and strongly disagreed with.

The proposed development fundamentally relies on mitigation of impacts yet the proposed mitigation activities outlined in the SIA are not adopted in the proposal. Without clear commitments to these mitigation activities it is not possible to fully review the overall cost / benefit assessment and SIA. It must also be noted that any commitment to the mitigation activities will not remove all negative externalities.

No clear compliance regime is proposed to manage impacts and the mitigation strategies proposed.

As the airfield is essentially "self-contained" with students living onsite and undertaking an intense training schedule, there is not likely to be very significant social interaction between students and the local community. The students will be dependent on bus transport, which implies they will probably travel in groups, minimising one-on-one contact with existing businesses and residents in the surrounding towns and villages. The activities proposed would provide some opportunity for positive social interaction but it is not detailed how this would be achieved. Therefore the claims for protecting and improving the economic and social resources of the Bega Valley have not been adequately demonstrated.

Consideration of whether the development aligns with "the principles of ecologically sustainable development, including conservation of biodiversity, energy efficiency and taking into account projected changes as a result of climate change" is provided below.

A Sustainable Design Management Plan (SDMP) was provided, however adoption of any further ecologically sustainable measures beyond the bare minimum legislated essentials of the Section J report of the BCA, stormwater and landscape plans in accordance with Council's DCP, and rainwater harvesting for the provision of domestic water supply has not been forthcoming (see in-depth assessment later in this report). Opportunities such as adoption of solar passive design, waste avoidance and minimisation through careful procurement or use of composting systems, or energy efficiency measures to minimise the need for artificial lighting, heating and cooling have not been incorporated into the design. Overall, it is considered that the proposal is not aligned with ecologically sustainable development.

(b) to provide employment opportunities and strengthen the local economic base by encouraging a range of enterprises, including tourism, that respond to lifestyle choices, emerging markets and changes in technology

The proposal would provide employment opportunities, however whether there would be an overall net benefit in employment as result of this development being established in the Bega Valley has not been

adequately demonstrated (for further detail see assessment of Socio-Economic Impact Assessment). Insufficient information has been provided on how the development would strengthen the local economic base. Council considers that it has not been adequately demonstrated that the proposal will not have a negative impact upon existing tourist operators and agricultural operations.

(c) to conserve and enhance environmental assets, including estuaries, rivers, wetlands, remnant native vegetation, soils and wildlife corridors,

The Biodiversity Assessment Addendum Report details that the development would impact on a total of 6.76ha of good to moderate condition EEC. The report recommends establishment of an offset area. Council considers that securing the protection of the endangered Lowland Grassy Woodland community outside the main development footprint would be an important measure to offset the proposed impacts. Importantly, if the condition of the vegetation is improved and maintained overtime through a vegetation management plan (VMP) the offset would be of greatest value and consistent with conserving and enhancing the vegetated EEC located onsite.

Therefore it is considered that there is opportunity, through a conditional approval complete with a VMP, to conserve and enhance the EEC at the subject site. However issues in relation to effluent disposal on the site and likely further required clearing of good quality EEC to comply with the requirements of CASA's advisory publication CAAP 92-1 (1), have not been adequately considered. Therefore Council must conclude that the impacts upon remnant native vegetation have not been adequately detailed and assessed, and insufficient information has been provided to demonstrate that the impacts are satisfactory.

Further, whether the impacts of the proposal are satisfactory with regard to the proposed use of other airports is not known and comment is not able to be made.

(d) to encourage compact and efficient urban settlement,

The development is not considered to be consistent with the aim as it proposes high density accommodation of approximately 120 persons well away from existing urban settlement. The site does not benefit from essential services and therefore is not consistent with the desire for compact and efficient urban settlement outlined in the aim of the plan.

(e) to ensure that development contributes to the natural landscape and built form environments that make up the character of Bega Valley,

The proposal to establish a flight school of the proposed scale at the subject site is considered inconsistent with the existing character in the Frogs Hollow locality. However, in relation to visual impact, the application was supported with a visual impact assessment and it has been adequately demonstrated that visual impacts from buildings and aircraft could be adequately mitigated (see Visual Impact assessment).

(f) to provide opportunities for a range of housing choice in locations that have good access to public transport, community facilities and services, retail and commercial services and employment opportunities,

The development proposes onsite accommodation for the use of student pilots only. The development does not meet or comply with this aim given there is no interaction of the site with other services in the surrounding area.

(g) to protect agricultural lands by preventing land fragmentation and adverse impacts from non-agricultural land uses,

Council received public submissions detailing potential noise impacts on beef and sheep grazing, dairy herds in the area and potential contamination of land and waterways from exhaust pollution from

the aircraft. These matters, specifically relating to livestock productivity and quality, training circuits being conducted over Wolumla Creek, and potential pollution of agricultural land, were raised in a referral to NSW Department of Primary Industries (DPI). The response Council received was inconclusive as it did not take into consideration the scale of the proposal, proximity to livestock, or size of aircraft, and provided general advice only (see Appendix 2). Therefore Council is not able to comment on whether the proposed flight activities would result in adverse impacts upon neighbouring farms.

The application was supported with an air quality assessment that concluded that the predicted pollutant concentrations from the proposed aircraft emissions using worst-case inputs are low in comparison against EPA Approved Methods criteria. The report advises:

Air pollution that is known to impact vegetation and agriculture include particulates, flourides, sulphur dioxide and ethylene.⁴ The proposal is not a significant source of these pollutants. Possible effects of identified air pollution to the agricultural land and vegetation are secondary damage in the form of minor distresses in their growth but can only take effect at high concentration level.⁵ The predicted concentration levels are very low and adverse impacts on any local vegetation or agricultural land are not anticipated.

Therefore Council does not have concerns with the potential for aircraft emissions to cause significant pollution impacts upon adjacent land users. It is not considered likely that emissions from the flight school would result in significant impacts upon soil or waterways. The report did not provide comment in relation to organic certification thresholds.

Airport Practice Note 6: Managing Bird Strike Risk Species Information Sheets released by the Australian Airports Association (AAA)¹ provides land use planning guidance in the vicinity of aerodromes. The publication details uses within a 3km radius that are incompatible with aerodromes due to their propensity to attract birdlife, which can become an unacceptable risk to aviation. The report details that piggeries and orchards are incompatible uses within 3kms of aerodromes. Council observes that piggeries and orchards are activities that would be associated with agricultural lands, and that establishment of a flight school of significant scale in this location may prevent these types of activities being established in Frogs Hollow in the future.

¹ https://www.atsb.gov.au/media/5353201/managing_bird_strike_risk_species_information_sheets.pdf

(h) to identify and conserve the Aboriginal and European cultural heritage of Bega Valley,

It is considered that the development has not adequately addressed potential impacts on Aboriginal cultural heritage at the site.

Comments received from NSW OEH identified that the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW has not been followed, and an AHIMS search has been conducted but this does not conclusively determine that no Aboriginal objects exist on the parcel.

Subsequent to receiving this advice the applicant carried out an Aboriginal Due Diligence Assessment which noted that there are landforms in the development footprint that have moderate to high potential to contain subsurface archaeological material. NGH recommended that an Aboriginal Cultural Heritage Assessment report (ACHAR) be completed.

The amended submitted report was again referred to NSW OEH who advised that the ACHAR should be completed prior to development approval, with this timing providing the best opportunity to conserve Aboriginal heritage sites.

Subsequently the proponent advised Council that they would not be undertaking further investigations in relation to Aboriginal Cultural Heritage prior to development consent being granted. Instead it was noted that the application is not integrated development with regard to Aboriginal Heritage and further

investigation would be undertaken prior to works commencing on the site. The response suggested that these matters could be adequately captured in a condition of consent, requiring an ACHAR prior to any works commencing, and that subsequently any items of Aboriginal Cultural Heritage could be dealt with through application for an Aboriginal Heritage Impact Permit (AHIP).

Council notes that this approach is inconsistent with the Aim of the Plan which seeks to “identify and conserve” the Aboriginal cultural heritage of the Bega Valley. Given the applicant’s response, Council is unable to advise that the development has identified or conserved any items of Aboriginal cultural heritage within the site.

(i) to restrict development on land that is subject to natural hazards,

The subject site is mapped as bush fire prone. The applicant has addressed and restricted development so that it would not be affected by natural hazards, namely bush fire. The application was referred to NSW RFS in accordance with Section 100B of the Rural Fires Act 1997, and general terms of approval were provided. Therefore it has been determined that the potential hazards from bush fire can be managed.

(j) to ensure that development has minimal impact on water quality and environmental flows of receiving waters.

The application proposes to install 10 Ozzi Kleen SK25 A-G sewage treatment plants to service the development. The effluent water is proposed to be disposed of through a combination of methods, including surface spray irrigation over the runways, absorption trenches, and landscape effluent irrigation area.

The application has been reviewed by Council’s Environmental Health Officer and Environmental Services Unit who have noted unresolved competing issues in relation to: preservation of EEC offset areas not impacted by infrastructure; preservation of runway integrity for the diversity of aircraft that may wish to use the runway for taking-off and landing; and space to dispose of the estimated volume of effluent water.

While the competing issues have not been resolved satisfactorily, it is considered that adequate space remains on site to dispose of the quantity of wastewater likely to be generated from the proposal without compromising the water quality of nearby waterways.

Further, it is considered unlikely that the quantity of water proposed to be captured on site through rainwater harvesting will have a significant impact upon the environmental flows of receiving waters.

2.3 Zone objectives and Land Use Table

The application has been lodged over two parcels, with the airfield lot zoned SP2 Infrastructure and the access road being a separate lot zoned RU1 Primary Production. The relevant parts of the land use table are provided below:

Zone RU1 Primary Production

1 Objectives of zone

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*

- *To encourage development for tourism-related activities and other development that is compatible with agricultural activities, which will not adversely affect the environmental and cultural amenity of the locality.*
- *To maintain and protect the scenic value and rural landscape characteristics of land in the zone.*

Access to the SP2 zoned land from the Princes Highway is provided over a private road. The access road is contained within a parcel zoned RU1 Primary Production. Upgrading of the access road would not result in any impact that is inconsistent with the zone objectives.

Zone SP2 Infrastructure

1 Objectives of zone

- *To provide for infrastructure and related uses.*
- *To prevent development that is not compatible with or that may detract from the provision of infrastructure.*

2 Permitted without consent

Environmental protection works

3 Permitted with consent

Roads; The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose

4 Prohibited

Any development not specified in item 2 or 3

The proposal for a recreational flight school has been characterised as an airport, which is a type of air transport facility. The use is considered to be ancillary to the existing airport.

Under the Bega Valley Local Environmental Plan 2013, an airport is permitted with consent in the SP2 zone and a road is permitted with consent in the RU1 zone. The land uses are defined as follows:

airport means a place that is used for the landing, taking off, parking, maintenance or repair of aeroplanes, and includes associated buildings, installations, facilities and movement areas and any heliport that is part of the airport.

Note. Airports are a type of **air transport facility**—see the definition of that term in this Dictionary.

road means a public road or a private road within the meaning of the Roads Act 1993, and includes a classified road.

Council sought legal advice from Senior Counsel to determine whether the proposed land use was permissible in the SP2 zone. Council was advised that the land use is permissible in the SP2 zone.

Under the Bega Valley Local Environmental Plan 2013 (LEP) the subject land is zoned SP2 Infrastructure for the purpose of an Air Transport Facility.

In the SP2 zone, the purpose shown on the land zoning map (air transport facility) is permitted with consent, "...including any development that is ordinarily incidental or ancillary to development for that purpose", therefore an air transport facility and an airport are permitted with consent.

However the SEPP (Infrastructure) 2007 applies and prevails over the LEP.

Comment on objectives of zone

The intensification of use of the Frogs Hollow Authorised Landing Area (ALA) as proposed will not necessarily increase “infrastructure” at the airport. It is not proposed to remediate or seal the runways, establish communications infrastructure or provide air traffic control facilities or structures.

Construction of hangars, workshops, an underground tunnel, accommodation and associated roads, fuel storage and water storage is proposed, for the sole use of the SAFCA flight training school.

The existing Frogs Hollow Flyers recreational flying club’s clubhouse and hangars will either be removed or relocated to another area of the site.

Assessment against CASA’s Civil Aviation Advisory Publication (CAAP) 92-1 (1) reveals that the nominated 10m wide runway is only suitable for single engined and Centre-Line Thrust Aeroplanes not exceeding 2000kg Maximum Take-Off Weight (MTOW). Other aeroplanes utilising an Aeroplane Landing Area would require a 15m wide runway, and the publication recommends a 15m wide runway for Aeroplane Landing Areas.

The proposal to repeatedly irrigate effluent over the runway surface has not been formally endorsed by a geo-technical engineer with regard to the potential of the effluent to undermine the integrity of the runway surface. Confirmation that the runway could continue to be used by a range of aircraft has not been verified.

The applicant has expressly advised that the airport will remain “open and accessible to other aircraft not associated with the flight school” (Appendix 7), however the proposal in its current design may in fact detract from the provision of infrastructure at the site by limiting the types of aircraft that would be able to safely use the site into the future.

Prior to gazetting of the CLEP 2013 when the land was rezoned SP2 for the purposes of an Air Transport Facility, the site was zoned 1(a) Rural General Zone under BV LEP 2002. Details outlining the Council’s deliberations in the rezoning of the subject site are provided in the Planning and Environment Committee meeting report dated 10 June 2008. Given that the site was under private ownership, risk of losing the site was front of mind. The report details that the “...Frogs Hollow Airstrip is an important emergency airfield that has been used for these purposes over many years. Additionally it is used by a number of people for small private aircraft. It is considered that by zoning part of the land as Special Purposes SP2 (Air Transport Facility) in the Comprehensive LEP it will protect the site into the future”.

A media release from 16 August 2007 notes that Council’s Acting Environment, Planning and Development Director at the time said “While the Frogs Hollow facility is not classified as an airport, but as an ‘Authorised Landing Area’ it has significant benefits in providing an emergency landing area between Merimbula and Bega”.

Undulant topography is a significant feature of the Bega Valley. Suitable locations for airports are very limited. Only a handful of sites can reasonably accommodate an airport in the Bega Valley and therefore protection of any existing sites is vital.

The proposal does not demonstrate consistency with the SP2 zone objectives in its current form.

4.3 Height of buildings

(1) The objectives of this clause are as follows:

(a) to retain the existing character and landscape of the locality and to encourage a low-set building form,

(b) to protect residential amenity, views, privacy and solar access.

The extent of the overall buildings within the site is not considered to retain the existing character and landscape of the locality. The application provided an indicative landscape screening of the structures from public vantage points and it is considered reasonable that appropriate vegetation screening could mitigate impacts on the existing character and landscape of the locality.

Having regard to the overall development, it is not considered that the development would retain the existing rural character and landscape of the site.

(2) The height of a building on any land is not to exceed the maximum height shown for the land on the Height of Buildings Map.

The development site is subject to a maximum building height of 10 metres. The maximum building height measures 6.26 metres, and is therefore consistent with the maximum height limits.

5.10 Heritage conservation

The objectives of this clause are as follows:

- (a) to conserve the environmental heritage of Bega Valley,*
- (b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,*
- (c) to conserve archaeological sites,*
- (d) to conserve Aboriginal objects and Aboriginal places of heritage significance.*

A Due Diligence Assessment was provided by the applicant and it was noted: "No AHIMS sites have been currently recorded within the proposed project area. There were 96 Aboriginal sites recorded within this search area and no declared Aboriginal Places (Table 1)".

During a field inspection, no Aboriginal cultural material was identified, but poor surface visibility was encountered. The reports states that "There are topographic elements present in the study area, and that would be disturbed by the proposed development that have moderate to high archaeological potential". It states that "The same topography that makes the location useful for aircraft take-off and landing, namely a gentle plateau sited within more dissected country, would indicate a higher archaeological potential than the immediate surrounds". The report details that Ron Thomas from the Bega LALC participated in this survey.

The report provided the following recommendations:

- 1. The proponent should undertake an Aboriginal Cultural Heritage Assessment of the proposed flight training facility with a view to undertaking test excavation in the development footprint.*
- 2. Test excavation could be undertaken under the NSW Code of Practice for Archaeological Investigation, following completion of Aboriginal community consultation procedures specific in the NSW OEH Guidelines for Aboriginal Community Consultation for Proponents.*
- 3. Test excavation should sample a range of topography with close reference to proposed high impact development footprint (hangars, accommodation, boundary track).*
- 4. A copy of this report should be supplied to the Bega LALC for their records.*

The amended submitted report was referred to NSW OEH who advised that the ACHAR should be completed prior to development approval, with this timing providing the best opportunity to conserve Aboriginal heritage sites.

Subsequently the applicant advised Council that they would not be undertaking further investigations in relation to Aboriginal Cultural Heritage prior to development consent being granted. It was noted

that the application is not integrated development with regard to Aboriginal Heritage and further investigation would be undertaken prior to works commencing on the site. The applicant advised that these matters could be adequately captured in a condition of consent, requiring an ACHAR prior to any works commencing, and that subsequently any items of Aboriginal Cultural Heritage could be dealt with through application for an Aboriginal Heritage Impact Permit (AHIP).

Council notes that this approach is inconsistent with the objectives of Clause 5.10 which seeks to “identify and conserve” Aboriginal objects and Aboriginal places of heritage significance. The applicants own Due Diligence Assessment has identified the site as having a moderate to high archaeological potential.

Advice was received from the Bega Local Aboriginal Land Council (LALC) on 20 November 2018 advising that the Bega LALC endorse the recommendations of the report and agree that further assessment of the Aboriginal heritage values of the subject area is required. It noted, consistent with the advice from NSW OEH that “This assessment should include a consultation process with Aboriginal stakeholders as required under the relevant legislation. The consultation process can address tangible and any non-tangible Aboriginal heritage values that may be associated with the subject area”. The report noted in closing that “Bega LALC hold the view that the further assessment of Aboriginal heritage values should be undertaken prior to BVSC finalising the development consent”.

Therefore, Council does not agree that an appropriate level of investigation into Aboriginal archaeology has been undertaken to consider the potential impacts. By approving the development the opportunity would be lost to identify potential measures to mitigate harm.

6.2 Earthworks

The objective of this clause is “to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land”.

Before granting development consent for earthworks, the consent authority must consider the following matters:

- (a) the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,*
- (b) the effect of the development on the likely future use or redevelopment of the land,*
- (c) the quality of the fill or the soil to be excavated, or both,*
- (d) the effect of the development on the existing and likely amenity of adjoining properties,*
- (e) the source of any fill material and the destination of any excavated material,*
- (f) the likelihood of disturbing relics,*
- (g) the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,*
- (h) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.*

The consent authority must consider before granting consent the implications of the proposed development on the environment/locality in relation to earthworks.

The proposal requires excavations to provide level building platforms, an under airfield walkway and perimeter roads.

No geotechnical reports were provided with the application detailing the suitability of soils for the works or the extent of excavation required to undertake the under airfield walkway.

The applicant has provided insufficient information to determine impacts on cultural items. The application was supported with a Due Diligence Assessment that predicted a moderate to high archaeological potential given the topographical features of the site. Council does not support the proposed extent of excavations without further investigation into Aboriginal Archaeology within the site.

6.5 Terrestrial biodiversity

The subject site contains a significant stand of good to moderate condition Lowland Grassy Woodland Endangered Ecological Community (EEC). Consideration of this matter has been detailed under Section 1(b) the likely impacts of the development.

6.6 Riparian land and watercourses

The application has been lodged over two lots. Lot 1 DP 245789 contains the access road which crosses a causeway. As part of this development, significant upgrading works are proposed to the access road and water crossing in the form of a new bridge. Under the Strahler system the waterway is mapped as a 2nd Order Stream, however it is noted that the location of the causeway is adjacent to an existing dam which gives the appearance of a more significant waterway.

It is not likely that fish passage would be affected by the proposal and referral to DPI Water for a CAP is not considered warranted in this instance, given the minor nature of the stream.

Council has reviewed the OSSM and considers that adequate buffers to catchment areas are provided.

Section 4.15(1)(a)(ii) Draft Environmental Planning Instruments

The application was considered in relation to the draft SEPP Coastal Management, which at the time of lodgement was imminent. The subject site is not mapped within the extent of the coastal management zone.

The application was considered in relation to the draft SEPP Koala Habitat Protection and draft SEPP Remediation of Land. In the instance of this application, the proposed changes to the SEPPs would not materially change the assessment outcomes.

Section 4.15(1)(a)(iii) any development control plan

Bega Valley Development Control Plan 2013

4 Rural Development

4.6 Rural Landscapes; 4.6.1 Character Statement; 4.6.1.1 Existing Character

The Bega Valley Development Control Plan 2013 (DCP) introduces this chapter by providing context as follows:

The Bega Valley Shire has some of the most significant rural, coastal and native forest scenery in New South Wales with many world class landscapes.

The quality of the scenic landscape is a significant factor in the attraction of the area for tourism and in the lifestyle quality for residents.

The significance of some of the Bega Shire's landscapes was recognised in a recent initiative by Tourism Australia and Parks Australia to identify Australia's iconic landscapes. As part of the National Landscapes Program an area from Bermagui in the north of the Shire to Lakes Entrance in Victoria was identified. The aim of the program is to achieve national and regional conservation, social and economic outcomes.

The area from Bermagui to Lakes Entrance is designated 'Australia's Wilderness Coast' and is described in the "National Landscapes" publication by the Australian Government and Tourism Australia as 'A rare and relatively untouched region with an unspoilt wilderness coastline, [which] provides authentic year-round experiences relating to landscapes, natural history and living culture.... Australia's Coastal Wilderness encompasses stunning coastal and wilderness walks, rich with diverse flora and fauna'.¹

Inland, many of the Shire's rural landscapes are 'cultural landscapes' - physical areas with natural features and elements modified by human activity that have resulted in land use patterns layered in the landscape, which give a place its particular character, reflecting human relationships with association with that landscape.

The Shire's most evident cultural landscapes tend to be related to its pastoral heritage. Physical evidence of this heritage includes pastures and paddocks (including dairying/piggery/corn cropping assemblages), homestead compounds, stand-alone dairies/ cheese manufacturing buildings, plantings around homesteads or driveway entrances and cultural planting of exotic flora at homesteads such as Kameruka.

Less evident, but no less important, are the landscape values of the Aboriginal community both in the historic and current cultural settings and the historical transport and travel routes used by Aboriginal and European travellers.

¹http://www.tourism.australia.com/content/aussie_experiences/2008/National_Landscapes_Brochure_0608.pdf

4.6.2 General Requirements

This part of the DCP is relevant to this application and states "Visibility of new buildings from regionally or locally significant public roads and vantage points must be minimised by planting trees and shrubs between the view sites and the structure and immediately adjacent to the structure. Landscape planting must reflect existing landform and natural vegetation". An indicative landscaping screen with no details on plant species has been provided. An extensive vegetation strip would need to be implemented to ensure existing views of agricultural grazing lands afforded from the Princes Highway would be maintained. A detailed landscape plan from an appropriately qualified landscape architect/horticulturalist itemising the planting and maintaining of screening vegetation would be required to mitigate visual impacts when viewed from the Princes Highway.

5.3.1 Access and mobility impact assessment

The application was referred to Council's Environmental Health Officer who has advised that the plans as submitted demonstrate compliance with AS1428-2009.

5.4 Social and Economic Impacts

The objective of this section is to ensure that the impacts of certain developments on social and economic factors are considered.

The objectives of requiring a Socio-Economic Impact Assessment are to ensure that:

- The amenity created by services and facilities is preserved.*
- A liveable and sustainable community is achieved by considering both environmental and economic issues.*
- The views of the people most affected are taken into account.*
- Effective community/local government participation is promoted.*
- Positive and negative impacts are identified early so as to allow the proper consideration of proposed developments.*
- Determine and assess possible measures for the management or mitigation of likely impacts.*
- The impacts on amenity are equitably distributed in the community.*

- *The applicant can present the anticipated effects of the development in a detailed and balanced form for Council consideration, showing how it will meet Council's Social Plan and other relevant planning instruments and policies.*
- *Impacts that are acceptable to the community can be identified.*

The application was supported with a Socio-Economic Impact Assessment report (SIA), which was undertaken after the application was lodged.

The objectives of requiring a Socio-Economic Impact Assessment, as outlined in Council's DCP are listed below and comment is provided:

– *The amenity created by services and facilities is preserved.*

Services and facilities contributing to amenity in the Frogs Hollow area are limited. The amenity of the Frogs Hollow locality arises predominantly from its rural character and from a very low density of development. Where development has been carried out, it is largely beneficial to the local community (such as the provision of housing, major connecting roads, wireless internet infrastructure) or of low impact, such as the currently very low recreational-only use of the airfield, Council waste facility or occasional use of the Go Kart track. Therefore, as a result of constrained development, rural/semi-rural amenity in the near vicinity of the Frogs Hollow airfield is quite high generally. Submissions received from residents in the locality detail the benefits they currently experience of a rural setting; access to clean air, low background noise levels, clean rain water harvesting, birdlife and wildlife, privacy and a relatively high level of ambient peace.

It should be strongly identified that the existing operation of Frogs Hollow airfield only provides approximately 15 flights per week to recreational flyers. Site inspection identified that the site has been predominantly used for grazing of livestock consistent to the surrounding agricultural and semi-rural residential living activities.

In the wider community of the Bega Valley, amenity is considered very high. Over the past 11 years, the mean rate of population growth of the Bega Valley Shire has been 0.60% (ABS, 2018¹) with older age groups (55 to 85+) demonstrating the highest rates of growth in the shire, with 2,458 additional persons out of a total increase of 1,295 over the five-year period 2011-2016 (ABS, 2011 and 2016²). This data suggests that the region is appealing due to its amenity and services to retirees, that segment of the population that are able to choose where they live because they are no longer bound to a location by their employment.

The SIA details that there are likely to be adverse impacts to amenity associated with the proposed development. The report states: "Impacts are likely to be most marked in the immediate locality where there will be a significant increase in the density of flight movements compared with the existing usage of the aeroplane landing area, and where aircraft are flying at lower levels. These amenity impacts are likely to consist of noise impacts, visual impacts and perhaps loss of privacy if overflying by aircraft results in people changing their behaviour".

While the SIA submits that the noise impacts will be below acceptable thresholds, and therefore satisfactory from a regulatory perspective, advice received by Council details that this has not been demonstrated. Therefore, it has not been demonstrated that the proposal would preserve the amenity of the locality.

¹ Australian Bureau of Statistics, Regional Population Growth, Australia (3218.0). Compiled and presented in profile.id by the population experts. Date published: 24 April 2018

² Australian Bureau of Statistics, Census of Population and Housing 2011 and 2016. Compiled and presented by .id, the population experts.

– *A liveable and sustainable community is achieved by considering both environmental*

and economic issues.

Interpretation of the word “community” is key to consideration of this objective. Submissions received by Council from the community in the immediate locality (within 2kms of the Frogs Hollow Airport) submit that the development would result in an untenable situation which is essentially “unliveable” and most certainly not sustainable. Residents within the broader 5km radius and all the way to the Shire boundaries and beyond raise concern about the likely impacts upon the sustainability of the community should the proposed flight school proceed.

The amended Renzo Tonin & Associates (RTA) noise assessment report suggests that the noise impacts are limited to an acceptable level. However flaws have been identified in the report, particularly with regard to the adoption of a $L_{Aeq, 24 \text{ hour}}$ noise criterion, which has the effect of averaging the noise energy over a 24 hour period instead of an 11 hour period that reflects the actual operating hours of the proposal. This has the consequence of underestimating the likely impacts of the noise from the aircraft. Council’s acoustical consultant noted that “The information format in the updated RTA report is not considered sufficient to describe the likely noise impacts at each of the noise sensitive receivers”. Their advice goes on to say,

The proposed development would have an adverse impact on the amenity of the area due to noise generation. Circuit operations and regular overflights at relatively low noise levels (when compared to noise levels in the vicinity of major airports) represent the key noise impacts associated with this type of development. Whether this impact is acceptable is dependent on whether an appropriate balance has been reached between any potential benefits of the development to the local or broader community, and the noise impacts on neighbouring communities.

In the absence of well defined or regulated criteria to set noise limits for this type of development, determining whether this balance has been reached, requires a complete description of the extent and nature of the impacts on surrounding areas. In our opinion, the level of information that has been provided is not sufficient for this purpose.

Therefore, the case for noise acceptability has not been made and it has not been determined that a liveable and sustainable community can be achieved.

In relation to economic impacts, the SIA identifies that direct tourism employment in the Shire has fallen between 2006/07 to 2015/16, and questions the efficacy of the Wilderness Coast Branding. The Wilderness Coast encapsulates a triangle-shaped area from Bermagui down to Orbost and west to Bombala. The report details that within this area are a variety of land uses, “...including towns, agricultural land, state forests and National Parks. Manufacturing is a significant employer in Bega Valley LGA, at levels well above those for NSW, so it is evident that the wilderness coast branding is compatible with a range of uses and there is no reason to believe it will not be compatible with the proposed flying school as a specified land use”.

Council acknowledges that manufacturing is a large employer in the Shire, with Bega Cheese’ manufacturing and processing plants being of notable mention. Given the overall population of the shire comparative to the percentage of employment opportunities available at Bega Cheese, it is logical that manufacturing would employ a higher percentage of people in the Bega Valley Shire compared with New South Wales overall. However it is noted that in addition to supporting the significant dairy industry of the Bega Valley, the impacts of Bega Cheese are confined to the agricultural lands of the Shire. It is noteworthy that the Bega Valley Shire comprises only 22% rateable land, with the remaining 78% being made up of National Park, state forest and flora reserves. It is this land in conjunction with the adjoining beaches that define the Wilderness Coast area branding.

The report states “The efficacy of the branding is questionable, given the findings above of a likely decline in tourism employment in Bega Valley LGA, and the clustering of tourism employment around traditional beach front locations”. Council’s Economic Development Team reviewed the report and provided advice, detailing that the proposal’s assumptions concerning employment impacts with regards to tourism does not utilise the accepted approach as to how the overall benefits of tourism and the ‘visitor economy’ are recorded in the Shire. To this end the proposal undervalues the impact on the tourism and visitor economy. The SIA assertion that the current branding of the Shire is ‘questionable’ in its efficacy is not supported by Council.

Tourism statistics vary with sources so caution is recommended when comparing the SIA to other available information. The SIA states that it is not using Bega Valley LGA information, yet LGA-specific information is available. This data is the data that is widely used as it quantifies the broader benefits of tourism / visitor economy spend throughout the economy and not just on direct jobs. This is important within a changing economic and technological context. As a result, the SIA does not effectively take into account the broader benefit of the tourism / visitor economy to the Shire and overlooks how the tourism (visitor) economy works. While the SIA attempts to explain this in section 8.2.2, Council disagrees with this methodological approach. As a result the real potential negative impact on the Shire’s economy by the proposal is significantly undervalued.

Commentary within the SIA that questions tourism brand efficacy does not take into consideration the broader objectives and cannot be relied upon to be accurate. The Wilderness Coast and Sapphire Coast brands are long-term investments in strategies designed to turn around long-term downward employment trends in Tourism and cannot, therefore, be used for short term analysis. State Government strategic direction through Destination NSW and the Destination Southern NSW – Destination Management Plan clearly articulates the ‘unspoilt’ ‘coastal wilderness’ experience of the Bega Valley Shire at its key positioning strength to domestic and international tourism markets. The SIA’s comments in this area are not considered valid.

Council’s Economic Development Unit identify that the SIA is based on a Cost Benefit Analysis (CBA) that is for a different sector (transport), and not appropriate to the sector (education) that the proposal relates to. The Net Annual Benefit (NBA) and Benefit Cost Ratio (BCR) are calculated using methods and values taken from the Transport for NSW Guidelines for Economic Appraisal of Transport Investment and Initiatives. Council understands the proposed flight school to be an investment occurring within the education sector not the transport sector. Transport for NSW, in their guidelines, state that they are for use in the transport cluster. The SIA states “A new group of students will arrive each month for a three month training course. Each group of students will spend the first two months studying Aviation English, with the last month used for flight training”. Therefore use of the transport sector CBA is not considered appropriate to the development type.

As result it cannot be assumed that the economic methodology used is appropriate for the development proposed and as a result the \$6.8million - \$7.0 million NBA, the 4.6-5.1 BCR and use of the these values within the SIA are not considered valid. Further, unquantifiable impacts are not captured within the metrics and risk being eliminated from economic-based considerations.

In conclusion, Council submits that it has not been demonstrated that a liveable and sustainable community can be achieved by considering both environmental and economic issues.

– The views of the people most affected are taken into account.

No community consultation with potentially affected stakeholders was undertaken prior to lodgement of the development application. Subsequent to lodgement and Council’s advertising of the development, the SIA was undertaken, with Council detailing the requirement to consider the submissions received during the notification period. Subsequently, the SIA incorporated consideration of the summary of the 462 submissions received by Council, interviews with 10 stakeholder groups and

carried out a survey of 29 properties in the immediate locality. Respondents from nine properties completed a survey.

The SIA acknowledges amenity impacts in the immediate locality as a result of the intensity of flight operations, including noise impacts, visual impacts and loss of privacy. The SIA details reliance upon the adopted noise criteria being adequate to limit noise impacts to “regulatory standards” in this scenario, at which point the noise is considered “acceptable”. However, as previously discussed, the noise assessment report fails to demonstrate an acceptable noise impact.

The SIA details likely impacts in the wider locality “including tourist destinations such as beaches and wilderness areas like national parks, where overflying by large numbers of aircraft would be expected to have significant adverse impacts on character and amenity”. National Parks noted reliance on wilderness branding for the area. Concern was raised by the operators of Merimbula and Moruya airports in relation noise impacts. The SIA report notes opportunity to mitigate against such impacts through the adoption of later starts on Saturdays, adoption of right-hand circuits only for runway 18, restricting use of runways 09 and 27 for use only when required, designating approach points to the circuit to minimise overflying of residences, avoiding overflying of urban areas, conducting coastal flying 1-2kms offshore, restricting tracking along the coast to between Tathra and Bermagui, preparation of an ANEF based on a greater number of training circuit movements being flown at Merimbula and Moruya airports, and adoption of designated flight paths to reduce impacts.

However the possible mitigation measures detailed in the SIA have not been adopted as part of the proposal or detailed in the Statement of Environmental Effects Addendum. Further information received by Council titled “Flight Paths” (Appendix 12) states that “There are no such things as designated flight paths for flight schools”. It continues, “Training aircraft operate freely within the training area adhering to the flight operation regulations as regulated by RA-Aus and CASA”. Therefore adoption of flight paths to mitigate impacts upon wilderness areas, urban areas, coastal areas and dwellings identified in the SIA, do not feature in the application.

Of concern to Council is that subsequent to carrying out the socio-economic impact assessment and reviewing the submissions from the Bega Valley, Moruya and Mallacoota communities, no amendments to the scale or design of the proposal have been assumed. The mitigation measures have not been adopted by the applicant or further detail provided on how they will be mitigated. The SIA fundamentally relies on mitigation of impacts yet the proposed mitigation activities do not form part of the actual proposal. Without clear commitments to these mitigation activities it is not possible to fully review the overall cost / benefit assessment and SIA report. It must also be noted that any commitment to the mitigation activities will not remove all negative externalities. The mitigation methods discussed in the SIA are an indirect recognition of the costs borne by those other than the applicant. It must be acknowledged that mitigation does not eradicate an impact and these impacts are acutely placed on rural and rural residential occupants surrounding the flight school location and residences where flight training will occur, being Merimbula, Mallacoota and Moruya.

The application was lodged with Council as a “recreational flying school” at Frogs Hollow, and was advertised by Council in the Bega, Merimbula and Eden newspapers. Detail regarding the intensity of flight circuit training to be carried out at other airports (Mallacoota, Merimbula, Moruya, Bombala, Cooma Snowy Mountains and Polo Flat) was received by Council on 18 October 2018 and this detail has not been made public to the full range of affected stakeholders. The proposed flight circuit training proposed to be undertaken at these other airfields is considered to be significant, particularly comparative to the existing level of use currently experienced at these airports.

It is considered that while effort to consider the community’s views has been undertaken in the SIA, that consideration has not informed amendments to the design, scale or operations of the proposal, and therefore the views of the people most affected have not been considered. This is evident by the number of submissions received during the advertising of the application.

– *Effective community/local government participation is promoted.*

See response above.

– *Positive and negative impacts are identified early so as to allow the proper consideration of proposed developments.*

See response above.

– *Determine and assess possible measures for the management or mitigation of likely impacts.*

See response above.

– *The impacts on amenity are equitably distributed in the community.*

The impacts on amenity would be acutely placed on residents surrounding the Frogs Hollow airfield. It is likely that land users around the airports at Bombala, Polo Flat, Merimbula, Moruya, Mallacoota and Cooma Snowy Mountains would also be affected by flight circuit training. Information provided in the application proposes up to 1,920 additional flight movements per month at each of these sites excepting for Moruya which would experience up to 2,880 additional flight movements per month. It is considered that the application does not meet the objective of distributing the impacts on amenity equitably in the community.

– *The applicant can present the anticipated effects of the development in a detailed and balanced form for Council consideration, showing how it will meet Council's Social Plan and other relevant planning instruments and policies.*

The SIA provides an assessment of the proposal's compatibility with the "Planning Objectives" in Chapter 9. It notes that the proposal aligns strongly with item (b) in the BV LEP Aim of the Plan, but does not provide any comment on the other items. Council considers that the proposal does not align with the Aim of the Plan for the reasons outlined earlier in this assessment.

The SIA considers the RU1 zone objectives. It states: "The proposal is consistent with the objectives for the RU1 zone and aligns strongly with the fifth dot point in that it will develop tourism-related activities which are compatible with agricultural activities, however there is likely to be some impact on cultural amenity of the locality". The application details that only upgrading of the access road and intersection with the Princes Highway is proposed in the RU1 zone. The recreational flight school is proposed to be developed over land zoned SP2 Infrastructure. Assessment against the SP2 zone objectives is not provided, however as previously detailed the application fails to demonstrate consistency with the SP2 zone objectives.

Council's Economic Development Unit has provided comment on whether the proposal meets Council's Economic Development Strategy, and notes concerns;

The SIA, in section 9.3, provides statements that demonstrate an alignment between the proposal and Council's Economic Development Strategy (EDS) stating that the proposal can be argued to fulfil the five EDS goals:

- 1. Embracing business and a stronger economy*
- 2. Providing the foundations*
- 3. Embracing the opportunity*
- 4. Partnering for success*
- 5. Enhancing visitor experience*

Applying the EDS goals to a complex development application with unquantifiable negative externalities, for which only voluntarily mitigation strategies are proposed is problematic.

Council must look beyond the single economic investment or activity and assess using sustainability principles that examine the interconnectedness of the local economy with social and environmental spheres – a triple bottom line approach – and how the proposed development meets current needs without compromising the ability of future generations to meet their needs.

Council considers that this aspect has not been fully integrated into the SIA, and therefore the proposal is not considered to align completely with the five EDS goals above.

The SIA considers the community strategic plan (CSP) and identifies consistency with Goals 3 and 4:

- Goal 3: Our economy is prosperous, diverse and supported by innovative and creative businesses.
- Goal 4: We have meaningful employment and learning opportunities for people in all stages in life.

Council note that Goals 3 and 4 are written in context with the whole CSP, which includes the other ten goals:

- Goal 1: We are co-operative, caring and enjoy a culturally rich community life.
- Goal 2: We are an active, healthy community with access to good quality recreation and sporting facilities, and medical health care.
- Goal 5: Our air and water is pristine and our natural environment and rural landscape are protected.
- Goal 6: We are leaders in sustainable living and support innovative approaches to resource recovery and the production of renewable energy and food.
- Goal 7: Our Shire continues to be a vibrant, enjoyable, safe and affordable place to live.
- Goal 8: Our places retain their character and scale, development is well planned, and a range of goods and services are available with our Shire that meet local needs.
- Goal 9: We have opportunities to work, learn and socialise through the provision of affordable public transport and telecommunications services.
- Goal 10: We have a network of good quality roads, foot paths and cycleways connecting communities throughout the Shire and beyond.
- Goal 11: We are an informed and engaged community with a transparent, consultative and responsive Council.
- Goal 12: Our Council is financially sustainable and services and facilities meet community need.

While the proposal may be consistent with Goal 3 and 4, concern is expressed with the likely impacts of the development in relation to Goals 5, 7 and 8 (see assessment against the likely impacts of the development and site suitability later in this report).

Consideration of the Sapphire Coast Destination Management Plan (SCDMP) is provided and notes alignment with two recommendations, namely: “Every effort must be made to penetrate the inbound tourism market, using all the advantages held by the region...” and “Expand the range of quality visitor experiences to extend the existing and potential markets beyond summer peak season recreation”. However it is considered that in this instance the sections quoted have been taken out of context.

Under the heading “Part 2 Actions and Recommendations” the SCDMP lists recommendations including:

- *Focus on the region’s distinctive selling proposition – ‘unspoilt nature’ – identified in the ACW [Australian Coastal Wilderness] brand and the Visitor Profile and Satisfaction Survey, and continue to develop new experiences around the brand promise*

Given the extent of the impact of the operations beyond the immediate locality and beyond the Designated Training Area due to the use of other airfields, and the likely impacts upon wilderness areas as detailed in the SIA, it is considered that the proposal does not demonstrate consistency with this plan.

– Impacts that are acceptable to the community can be identified.

It has not been demonstrated that the impacts from the proposal are acceptable to the community, evidenced by the large number of submissions received by Council during the two advertising periods.

Conclusion

In conclusion, the SIA does not demonstrate that the proposal would result in a net benefit to the Bega Valley community and it is considered that the proposal would result in a detrimental impact to the Bega Valley and broader region.

5.5 Sustainable Design Principles

The objective of this section is to ensure that sustainable design principles (SDPs) are considered in developments. The document notes that all development is encouraged to achieve best practice in addressing SDPs from the design stage through to construction and operation.

Ecologically Sustainable Development (ESD) is a requirement of the Local Government Act (1993) and also the Environment Protection and Biodiversity Conservation Act (1999). The application of the principles of ESD to the design of built form has produced sustainable design principles (SDPs). A Sustainable Design Management Plan (SDMP) which details how the principles of Ecologically Sustainable Development (ESD) would be incorporated into the proposal is required for all commercial development greater than 1,500m².

The application was supported by a Sustainable Design Management Plan (SDMP):

The sustainable design features of the development should be marked on the building plans.

- The document identifies that it would need to meet the minimum criteria of Section J of the BCA. In addition to this, it incorporates rainwater harvest and reuse.
- The report indicates that provision of a landscape plan would be supplied with the application for construction certificate.
- The report identifies the criteria that it needs to meet in relation to stormwater run-off and indicates that this detail will be supplied with the application for construction certificate.
- The report notes that the buildings are a “minimalist and modest” construction form and style which reduces the construction-phase waste.
- The report suggests that the building “could” be fitted with bin systems that require waste stream separation.
- The report suggests that buildings will be retro-fitted with solar panels over time, but does not commit to any timeframe.

- The report suggests that indoor environment quality will be satisfactory, however it does not detail how indoor air quality will be achieved in conjunction with satisfactory noise levels. Consideration of indoor noise levels and mechanical ventilation requirements required to achieve this is required.
- The report identifies that students will walk around the site, but that transport beyond the subject site boundaries would necessitate use of buses. Employees would drive to the site, given the remoteness of the location.
- The plan goes on to detail that the aircraft would use unleaded fuel and that aircraft emissions account for a low proportion of total emissions; the report details that 1.24 percent of total emissions in 2011 were created by domestic aviation activity.

Comment in relation to Table 5.1: Sustainable Design Principles which outlines key matters for consideration is provided below.

Energy

- The design does not incorporate solar passive design. 50% of the accommodation buildings face south without consideration of solar access, or to ensure natural light or passive heating or cooling. The building design does not ensure the efficient use of energy through layout or orientation.
- The accommodation buildings incorporate decent width eaves for shading (1200mm).
- Classrooms are provided with eaves (450mm N/S and 600mm eaves E/W) and windows, however windows could be increased in size and number to increase the natural light.
- The Main Building northern wall does not maximise the use of windows and is instead allocated mostly to toilets. Offices located on the northern side are closed rooms that heat would not likely transfer beyond. No eaves are proposed for passive cooling through shading.
- The cold room and kitchen is located on the south-western corner of the building which would be subject to high radiant heat in summer.
- It is likely that the accommodation buildings would experience significant overshadowing during winter given their proximity to one another (3m) inhibiting passive heating of the north-facing rooms.

The design does not reduce energy peak demand or ensure the efficient use of energy. Roofs are not oriented to the north or pitched to permit easy installation of solar panels and the panels would require the addition of brackets.

The use of steel, concrete, and glass, while durable, are materials of high embodied energy. Thermal mass from the concrete slab and natural light allowed to penetrate from the glass windows will not likely cause any overall beneficial effect from thermal mass or passive heating and cooling as they have not been used in accordance with the solar passive design principles.

The plan touches upon the use of aircraft as part of the development and that the aircraft would be fitted with a four-stroke engine which would use unleaded fuel (rather than aviation gasoline) and that aircraft emissions account for a low proportion of total emissions; the report details that “1.24 percent of total emissions in 2011 were created by domestic aviation activity”.

Water resources

The application proposes efficient use of water resources.

Ecology

- The application proposes to impact upon 6.76ha Endangered Ecological Community (EEC) Lowland Grassy Woodland but notes opportunity to offset the impacts of the development through careful management of the remaining 35ha through an instrument such as a

vegetation management plan (VMP). Council's Environmental Services Unit have reviewed the application and note that there is opportunity for a VMP to be established at the site which could secure the protection of the endangered Lowland Grassy Woodland community outside the main development footprint, which would be an important measure to offset the proposed impacts. In its current form, the proposal has not resolved competing issues, such as the need to dispose of effluent on-site and protection of nitrogen- and phosphorous-sensitive ecological communities.

- The plan indicates that a landscape plan made up of native plantings would be provided with the CC plans. Inclusion of indigenous species consistent with the EEC would be required for the site.

Stormwater Management

- Stormwater management of the site is considered satisfactory. All roofs will incorporate rainwater harvesting. Satisfactory stormwater quality and flows from road surfaces are considered to be achievable, and it is noted that a detailed design plan for stormwater would be supplied with the construction certificate.
- The application was reviewed by Council's Development Engineer who noted that roads and hardstand areas will be allowed to drain freely, but given the considerable size of the land this is unlikely to cause any issues for adjoining allotments. The report notes: "During CC [construction certificate] stage the road geometry and drainage should be reviewed to ensure stormwater discharge is not being concentrated over neighbouring land". The report notes that on-site detention is unlikely to be required, but infrastructure to capture water from impervious services and divert into gullies will likely be required in addition to overflow provisions for rain storage tanks. These items will need to be addressed in further detail prior to issue of the CC.
- Stormwater concept detail has been provided for the proposed access road.
- Stormwater infrastructure for the Princes Highway intersection has been included in the concept design to NSW RMS.

Waste Management

- The waste management measures detailed in the plan are limited to the construction phase and wastewater reuse (where it is proposed to recycle grey water for toilet flushing and fire-fighting supply).
- The plan states that "buildings could be fitted with bin systems that require waste stream separation", but does not provide further detail or commit to waste minimisation.
- No detail is provided in relation to how waste from the use of bottled water will be managed or minimised.
- No detail is provided in relation to meal preparation and how waste could be minimised through preparation of food without reliance upon pre-packaged goods.
- No detail is provided regarding potential incorporation of compost systems to divert waste from landfill.
- No commitments to use of reusable vessels for drinking water have been made.
- No commitments to waste minimisation through the operations phase have been incorporated into the plan.
- A waste management strategy is required detailing how minimisation of waste at the site could be achieved through construction and operational phases.

Indoor Environment Quality

- The plan states that "The proposed buildings would not be subject to adverse levels of internal noise during day time hours as indicated in the accompanying Noise Impact Assessment". The Noise Assessment does not discuss this matter. It states on page 21 that "An aircraft should reach an elevation of at least 500 feet before flying over any dwelling in order to

comply with $L_{A_{Smax}}$ 70 dB(A) and $L_{Aeq,24hr}$ 48dB(A).” The classrooms and accommodation are located adjacent to the runway and aircraft would not be at 500 feet elevation when adjacent to these buildings. Council has sought expert acoustical advice which provides that the impacts of the aircraft noise have not been adequately detailed and considered, and therefore the level of acceptability cannot be determined. Further consideration of noise mitigation and mechanical ventilation is required to ensure that students and staff are exposed to acceptable levels of noise in accordance with appropriate standards.

- Although the buildings would be required to align with a BCA Section J report, Council Officers do not agree that the buildings are capable of achieving thermal comfort levels with minimised need for mechanical heating, ventilation and cooling, given that the design does not incorporate solar passive design. Similarly, the design does not reduce reliance upon the need for artificial lighting.
- No detail has been provided in relation to the provision of innovative technology, design and processes which would positively influence the sustainability of buildings and the surrounding area.
- No detail has been provided as to how buildings will be integrated with landscaping, open spaces, accessibility or community facilities.

Conclusion

The SDMP provided has not stretched beyond the legal and basic operating requirements of developing the site (i.e. BCA Section J and rainwater harvesting which is essential as the site does not have access to reticulated water). Provision of the SDMP did not inform design iterations or improvements. While some matters, such as waste minimisation, landscaping and indoor environment quality (with regard to noise and ventilation), could be managed through mitigating measures, inadequate consideration has been given to solar passive design and therefore significant opportunity to reduce energy peak demand or ensure the efficient use of energy would be lost. The lack of regard given to effluent disposal over the site, of which the entirety is identified EEC Lowland Grassy Woodland, is not consistent with the requirement to protect and manage all remnant indigenous plant communities or protect and enhance biodiversity. Therefore the SDMP has not demonstrated that the proposal is aligned with the sustainable design principles.

5.7 On-Site Sewerage Management

The development application proposes to undertake on-site disposal of effluent for the entire development, as reticulated sewerage infrastructure is not available to the subject site. Whilst the applicant has demonstrated that a series of systems of on-site sewage management (OSSM) could conceptually be made to work, there is inadequate detail to support the use of the runways for the disposal of treated effluent, particularly in consideration of the proposed intensity of flight operations (which at stage 3 is proposed to be approximately 1,674 movements per week, reducing to approximately 1,507 movements per week at stage 9), that the airfield is proposed to remain open to other types of aircraft (requiring longer take-off and landing distances, and applying varying levels of impact upon the runways) and vehicles will be required to access the runway in order to maintain the grass runways. It is also noted that the use of treated effluent adjacent to remnant native vegetation including the identified moderate to good condition Endangered Ecology Community near the east-west runway is not appropriate from a nutrient perspective.

The initial On Site Sewage Management Plan (OSSM) dated 25 October 2017 proposed restricting the disposal of effluent to spray irrigation over the runways at the site. Council raised concern with this aspect of the OSSM due to potential spread of bacteria and potential geotechnical impacts upon the runways and requested provision of a letter from an engineer to confirm that irrigation of effluent onto the runways would not undermine the integrity of the runways through constant wetting for the use of aircraft. Council also raised concern that the centre two rows of sprinklers would need to be moved every time the runway was in use and no alternative location for the sprinklers had been identified.

A subsequent OSSM Addendum report dated 26 April 2018 provided for effluent disposal using an advanced secondary treatment with disinfection, and provided for the following methods of disposal:

- Surface spray irrigation of the runways,
- Subsurface irrigation of landscaped areas, and
- Infiltration disposal in absorption trenches.

The report states “Each of the above methods of disposal may be implemented individually or in combination to provide for disposal of all treated effluent on site”. The plan provided shows a combination of the three methods, and notes “irrigation is necessary for maintaining the grass cover on the runway and that provision would be made for irrigation of the entire runway which would be managed on an as needed basis”.

The Statement of Environmental Effects Addendum (provided coincidentally with the second OSSM report) expressly advises that the airport will remain “open and accessible to other aircraft not associated with the flight school”. The SOEE Addendum responded to Council’s concerns with the following statement:

It is considered that the safety of landing aircraft would not be compromised as the On-site Wastewater Management Plan and Addendum report demonstrate that the runways can adequately cater for the wastewater disposal levels that are proposed. In addition, the reports demonstrate there are several different disposal options and areas that would be satisfactory according to the relevant standards and so reliance on the runways for irrigation would be reduced. In reviewing the runway testing procedures contained in Section 9 of CAAP 92-1, it is considered that the runways would comply with the test standards. The On-site Wastewater Management Plan demonstrates that the runway would not be overloaded by irrigation, according to the parameters set in AS 1547 ‘On-site domestic wastewater management’ and the Sydney Catchment Authority guideline ‘Designing and installing on-site wastewater systems’.

Given that the plan continues to nominate irrigation of effluent over the runways, Council reiterated concern with this proposal. Of note is that AS 1547 does not detail the surface construction requirements of an Aeroplane Landing Area (ALA), and while the runways may be able to adequately cater for the wastewater disposal levels proposed, this does not demonstrate that they can simultaneously be used for the landing and taking off of a variety of aircraft. Therefore the response is not considered satisfactory to alleviate Council’s concerns.

The final OSSM Addendum report (dated 14 October 2018) was provided to address Council’s concerns in relation to buffers, errors in the calculation of disposal amounts, and whether NSW RFS are satisfied with the use of treated wastewater option for fire-fighting purposes. Concern was again expressed with the continued intention to dispose of effluent within the runways. The report is amended to show buffers, new calculations and an amended plan. No confirmation has been provided whether NSW RFS are satisfied with the use of treated wastewater for fire-fighting purposes, however it is noted that the RFS require a hydrant system that conforms with AS 2419.1-2005 (now 2017) be provided. This standard specifies that only class 4 recycled water can be used for firefighting purposes and the OSSM reports do not demonstrate that this can be achieved from the proposed systems of OSSM.

Council notes unresolved competing issues pertaining to the OSSM and the identified EEC Lowland Grassy Woodland existing within the site. The competing issues have not been resolved satisfactorily within updated OSSM reports which have not given satisfactory consideration to the findings and recommendations of the biodiversity assessment reports and do not adequately address potential impacts to the EEC via nutrient increases through treated effluent being disposed of on-site.

Based on the submitted information, Council does not support the recommendations in those reports as there is a lack of information detailing the potential impacts on effluent irrigation areas for the site and its ongoing management.

5.8 Planning for Hazards

5.8.3 Contaminated Land

The site has been in use as an airfield since before 1937, and therefore there is risk of contamination of the land from fuel spills. The application has been supported with a SEPP 55 Remediation of Land assessment which is satisfactory to address the matter of potential contamination.

5.8.4 Bushfire Prone Land

The site is bushfire prone and the application was referred to the NSW RFS under Section 100B of the Rural Fires Act 1997. Terms of approval have been issued by the RFS.

5.8.5 Climate Change

Climate change hazards apply to all new buildings and the Section J requirements of the BCA will go some way to ensuring that the impacts of hot days and severe weather are mitigated.

5.9 Off-street Car and Bicycle Parking

- Accessible parking spaces are required in accordance with the Australian Standard 2890.6.
- An accessible path of travel linking accessible car parks with the buildings is required.
- The car parking requirement for the site has been assessed at 201 total spaces and 225 spaces (including 23 accessible spaces) have been shown on the plans.
- Parking for delivery vehicles and buses x 2 is required to be shown on the plans, with 2 x daily deliveries for food proposed, and 1 x each per week for fuel and water. There is likely adequate space on the site to accommodate this.

6 Engineering Requirements

The proposed upgrading of the intersection to the Princes Highway has been a matter for the consideration of NSW Roads and Maritime Services, in accordance with the requirements of the SEPP (Infrastructure) 2007. Numerous revisions have been requested by NSW RMS. The most recent traffic assessment report, design plans, and design report are included as Appendices to this report. At the time of assessment NSW RMS had not provided concurrence.

Council's Engineer noted:

- Access will be provided directly via the Princes Highway. Given that the Princes Highway is a Classified Road, intersection design has been a matter for the applicant to resolve with NSW Roads and Maritime Services.
- Access to the site is over Lot 1 DP 245789. The proposed road design is generally consistent with Council's Development Design Spec D01 Section D.1.27, with 6.0m wide sealed road and 1.0m sealed shoulders. The road is not proposed to become a Council asset, but will be required to be designed and certified by a civil engineer. Further detail in relation to pavement and surface design will be left to the engineer and not specified by Council.
- The bridge will need to be designed and certified by a structural engineer.

- A right of access will need to be established across the access lot in favour of Lot 1 DP 109606 (airfield site), Lot 1 DP 1101320 (Go-Kart club), Lot 11 DP 1218164 (access for concessional lot subdivision) and Lot 11 DP 787822 (adjacent lot to the north).
- Further consideration is required in relation to the design of the internal site road, with the relevant matters being:
 - 6.0m width is sufficient
 - Safety needs to be considered and the design should comply with the BVSC design specification and/or Austroads
 - The road will need to be sealed to eliminate sediment run-off. The road will need to be designed with proper drainage and should not concentrate stormwater flows, especially near adjacent lot boundaries.

Section 4.15(1)(a)(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph)

Clause 92 of the EP&A Regulation 2000 requires consideration of the provisions of AS 2601 in the case of an application for the demolition of a building. There are structures on the site which are proposed to be relocated or removed.

Section 4.15(1)(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality

In the assessment of the development application there were several key impacts on both the natural and built environment and social and economic impacts in the immediate locality and elsewhere where the proposed Flight Training will occur.

Noise

Noise is an important issue for the site given the significant increase in flights, traffic and other development associated with the school. The application was supported with two very different noise assessment reports and a chronology of the assessment is provided below.

The application was initially supported with a noise assessment report prepared by Renzo Tonin and Associates (RTA). This report adopted the NSW EPA's Industrial Noise Policy (INP) methodology and criterion and established the project noise criteria as the intrusiveness criterion ($L_{Aeq, 15 \text{ min}}$) for each noise catchment area (NCA) of:

NCA 1 – 35 dB(A)

NCA 2 – 40 dB(A)

NCA 3 – 41 dB(A)

While Council agreed with the use of the INP methodology and the more stringent intrusiveness criteria, flaws in the methodology were noted including inadequate measurement of the rating background level (RBL) which should be based on a weeks' worth of data rather than just 1.5 hours, and insufficient noise assessment at various sensitive receivers.

NSW EPA commented on the application and noted that use of the INP is inappropriate for assessing the potential noise impacts from activities such as aircraft taxiing around the airfield prior to take-off or post landing, aircraft take-off and landing, or aircraft flying circuits around the airfield. They advised,

“Guidance on appropriate noise levels may be obtained by consulting the AS 2021-2015 Acoustics - Aircraft noise intrusion - Building siting and construction (Standards Australia, 2015)” (Appendix 2). The referral response was forwarded to the applicant.

The application was referred to Airservices Australia who provided comment on the application. They advised that Airservices had been in discussion with NGH Consulting on behalf of the applicant in relation to compiling an Aircraft Noise Exposure Forecast (ANEF) for the Frogs Hollow site. They advised Council, “Any noise regulation, restrictions on surrounding land and on the operations at the airport to manage noise may be set by council. Airservices is not involved in setting these restrictions as this is outside of Airservices jurisdiction. We recommend that the flight school commission the services of an acoustical consultant for detailed noise analysis” (Appendix 2). The referral response was forwarded to the applicant.

The application was referred to the Australian Government Department of Infrastructure, Regional Development and Cities, who advised Council to refer to guidance contained in the National Airport Safeguarding Framework (NASF), Australian Standard AS2021:2015 Acoustics - Aircraft noise intrusion - Building siting and construction (AS 2021), and Standards Australia book HB149:2016 Acoustics – Guidance on producing information on aircraft noise (SA HB 149). They advised that in order to manage potential noise impacts Council could consider options such as preferred flight paths for circuit training, noise abatement procedures including training hours, number of circuits and a fly friendly agreement (Appendix 2). The referral response was forwarded to the applicant.

Subsequently, RTA adopted AS 2021 as the basis for setting the criteria for the second noise assessment report. A daily average noise metric ($L_{Aeq, 24 \text{ hour}}$) of 48 dB(A) was adopted alongside a maximum noise threshold (L_{Amax}) of 70 dB(A).

Council engaged Marshall Day Acoustics (MDA) to review the noise assessment and the following issues were noted:

- “The assessment methodology and criteria in both RTA reports are not considered appropriate”.
- The RTA reports “...do not provide information which is specifically suited to assessing flight training and general aviation operations”.
- The updated RTA report nominates AS 2021 “...as the basis for setting criteria for assessing the proposal. AS 2021 is not appropriate for this purpose and includes specific statements to clarify that it is not intended for assessing new airport developments. Further, contrary to the assertions of the updated RTA report, the use of AS 2021 as the basis for assessing the development is not in accordance with Airservices or Commonwealth guidelines”.
- “The daily average noise metric ($L_{Aeq, 24 \text{ hour}}$) nominated in the RTA metric is not considered suitable as an assessment criterion, particularly given that the average includes significant periods when aircraft will not be operating (e.g. night periods). Furthermore, the selection of the 48 dB $L_{Aeq, 24 \text{ hr}}$ threshold has not been substantiated with appropriate evidence as an acceptable limit for the assessment of new aircraft noise impacts”.
- “The maximum noise level criterion of 70 dB L_{Amax} is significantly higher than the values nominated in alternative Commonwealth guidance for the assessment of general aviation operations”.

Advice was requested with regard to the appropriate methodology and criteria in the particular circumstances of this application. MDA advised that there are no established compliance criteria or well-defined thresholds for acceptability for assessing new aircraft operation proposals, which is why:

...information must be produced in a range of formats that are needed to assist regulators to make an informed decision about the relative merits and impacts of a proposed development.

An assessment of aircraft operations should supplement the noise level measurements, with predicted noise level contours to demonstrate the extent of area-wide noise impacts associated with the proposed development.

The assessment should therefore include information prepared on the basis of the guidance contained in:

- *Guidance Material for Selecting and Providing Aircraft Noise Information, 2003 and Expanding Ways to Describe and Assess Aircraft Noise, 2000*
- *National Airports Safeguarding Framework Guideline A: Measures for managing Impacts of Aircraft Noise, 2016 (NASAG)*
 - *SA HB 149:2016 Acoustics - Guidance on producing information on aircraft noise (SA HB 149).*

The information in the RTA report is therefore insufficient to describe the likely noise impacts at each of the noise sensitive receivers. Therefore it cannot be determined that the noise impacts are acceptable.

The report advises that the noise assessment should, at minimum,

...include information presented in the form of N- contours and should account for maximum noise levels significantly lower than 70 dB L_{Amax} (as per the guidance of the above publications). The contours should be prepared for operating scenarios that are representative of the impact of the range of operations e.g. noise contours for specific days of operation rather than an average of all operations.

Additionally, detailed flight path information and information on the number of movements using the proposed standard flight training areas should be provided.

All flight path information should also consider variation; the updated RTA report puts forward circuit tracks as single narrow lines, thus giving the impression to some people that the aircraft will fly on defined 'lines' in the sky.

In conclusion, the report advised that

The proposed development would have an adverse impact on the amenity of the area due to noise generation. Circuit operations and regular overflights at relatively low noise levels (when compared to noise levels in the vicinity of major airports) represent the key noise impacts associated with this type of development. Whether this impact is acceptable is dependent on whether an appropriate balance has been reached between any potential benefits of the development to the local or broader community, and the noise impacts on neighbouring communities.

In the absence of well-defined or regulated criteria to set noise limits for this type of development, determining whether this balance has been reached, requires a complete description of the extent and nature of the impacts on surrounding areas. In our opinion, the level of information that has been provided is not sufficient for this purpose.

Council Officers conclude that the noise assessment report has not demonstrated that the noise impacts are below an acceptable threshold. This conclusion is not limited to the subject site, but also to the immediate surrounding locality (2km radius), designated training area (DTA), and areas beyond the DTA and Bega Valley Shire.

Noise – ground based operations

Council requested detail in relation to the noise impacts from ground-based operations in accordance with the Noise Policy for Industry 2017. The amended noise assessment advised that details for the mechanical plant are not available at this stage of the development, and therefore in-principle noise mitigation measures were provided for the mechanical plant servicing the proposed facility. The report recommended that a more detailed assessment be undertaken during the detailed design stage of the project when schedules of the mechanical plant and equipment are known. However, the report did acknowledge that the project noise criteria for ground-based operations would be $L_{Aeq, 15min}$ 35dB(A) given that operations were likely to be carried on 24 hours per day. The report notes that with a distance of 520m between the mechanical plant to the nearest residential receiver, the maximum combined source sound power level should not exceed 97dB(A). The report goes on to identify measures that could be employed to control the emission of noise.

Council notes that likely noise generation from the site may from time-to-time include back-up generators for essential services such as water pumps, OSSM system pumps and fire-fighting pumps.

Council expresses concern that the nominated level has not taken into consideration the temperature inversions that occur at Frogs Hollow, indicated by the presence of fog. Although the SOEE Addendum notes that “Temperature inversions are of relevance to evening and night time operations only. There would be no ground-based operational noise generated by the proposed development as all aircraft training and maintenance activities would be undertaken during day time hours”. This statement is inconsistent with local accounts of fog in the locality occurring during the morning past 7am, and with the May 2018 RTA report which details that “Given that mechanical plant and equipment associated with the flight school are likely to operate continuously 24 hours per day, seven days a week, the assessment of intrusiveness is undertaken for the night time period as the night time trigger levels are more stringent than the daytime trigger levels”. Further consideration of the impacts of temperature inversion to both the mechanical plant and equipment to be operated on site and the flight operations is considered warranted.

In relation to the likely increase in traffic movements generated by this proposal, expert acoustical advice received by Council confirmed that:

- Where traffic movements occur within the site boundary of the proposal (i.e. private road between the site and the Princes Highway) they should be assessed in accordance with the NSW Noise Policy for Industry (2017).
- Where the proposal results in an increased of traffic movements on local/public roads (i.e. Princes Highway), the associated change in noise levels should be assessed in accordance with the NSW Road Noise Policy (RNP).
- That the likely increase in noise on the Princes Highway would likely be less than 1dB, thus very minor.

Therefore Council does not have concerns about the likely increase in noise from traffic generation at the site.

Amenity

The SIA details likely amenity impacts to the Frogs Hollow locality including noise impacts, visual impacts and potential loss of privacy. The document details that these impacts would be satisfactory because they would be in accordance with regulatory standards with regard to the level of noise and height of overflying.

The document details that there would likely be "...adverse impacts upon less tangible aspects of character and amenity in the immediate locality (that is, the way in which local residents experience their area), depending on the ultimate intensity of operations and the flight and training paths adopted". The SIA notes that while there may be opportunity to mitigate these impacts, mitigation would not eliminate them.

Council has received a significant number of submissions that raise concern with the likely loss of amenity and change in character of the locality as a result of the development. The likely loss of amenity referred to in submissions refers to a likely loss of desirability or attractiveness. The submissions include words such as "tranquility" and "peaceful" when referring to the amenity of the Bega Valley, and attribute loss of amenity to aircraft movements. Both MDA and the SIA confirm that the development would have an adverse impact upon the amenity of the area due to noise generation from aircraft. The extent of the loss of amenity relating to noise cannot be adequately understood from the detail provided in the noise assessment report. However it is noted that the scale of the proposal exceeds the capacity of the site with regard to the site's ability to accommodate the required amount of flight circuit training.

Currently, flight operations at the subject site are estimated at approximately 15 flight per week or 30 aircraft movements per week, with a movement meaning either a take-off or a landing. The majority of flight movements are concentrated on Sunday afternoons. Cattle graze the land, including the runways which are grass. Density of development at the site is consistent with other surrounding rural land uses, with low density development of sheds and hangars mostly clustered on the western side of the north-south runway.

The subject site is located in a rural part of the Bega Valley, with surrounding land uses being a mix of rural residential and beef and sheep grazing land. An operating dairy exists within 3km of the site to the north. Other uses include the NBN Co. Satellite Earth Station, a Go-Kart track and the Wanatta Lane Central Waste Facility. Although these last three land uses are not necessarily consistent with rural residential amenity, it is noted that impacts from these uses are either confined to their immediate site, or in the case of noise generation where it extends beyond the boundaries of the site, is of short and irregular duration.

The application proposes to increase the number of buildings at the site significantly from seven buildings and three shade structures, to a total of 104 buildings plus associated infrastructure.

Flight movements at the site are proposed to increase significantly from 30 per week to approximately 1,674 per week by Stage 3 of the development, reducing to approximately 1,507 per week in Stage 9 as the majority of flight training circuits (touch and go's) are undertaken at six other nominated airports. The application details 15 flying days per month (February to November) plus remedial training on Saturdays. On flying days, the daily flight take-off and landing schedule commences at 7am and concludes at 6pm, with most take-offs and landings scheduled 2 minutes apart. During periods that aircraft are not taking-off or landing, it is proposed that the runway would be used for flight circuit training (touch and go). The proposed change of character in the locality is significant.

The proposed designated flight circuits 09,18, 27 and 36 extend beyond the extent of the site boundary, and beyond the proposed land to be purchased by SAFCA. The flight circuits are undertaken between 0ft above ground level (AGL) at take-off/landing and 1000ft AGL (downwind leg) and would be undertaken over a large expanse of private property (including some residents' homes) located within a radius of approximately 1400m. 58 sensitive receivers have been identified by the applicant (inclusive of approved and commenced (but not yet constructed) concessional lots), with submissions indicating that two residences have been omitted, therefore 60 sensitive receivers are likely to be impacted. (The two dwellings located at the northern end of the runway and proposed to be acquired by SAFCA have not been included in this calculation).

In addition to flying circuits over surrounding private property, the application details that the flight training would be recorded by Go-Pro camera. Significant concern has been raised in submissions in relation to this aspect of the proposal. Council notes that at approximately 500ft elevation (approximately 150m) the opportunities for overlooking are significant. Although similar overlooking in an urban context is not considered at all significant, this level of overlooking in a rural context in combination with a recording device, without opportunity to screen or buffer between land users, could be considered intrusive. Concerns in relation to potential loss of privacy are considered to be valid.

The SOEE Addendum advises that a lighting plan is not able to be supplied until more detailed design is available. It is detailed that low-level lighting would be provided around the squadron compounds and the main building for security and safety reasons. Illumination of the runways, hangars and workshops would not be required as these would not be used at night. The report details that lighting would comply with the Australian Standard AS 4282 Control of the obtrusive effects of outdoor lighting and a lighting plan would be provided for Council's review prior to issue of a construction certificate. Therefore lighting is not considered to be of significant impact upon amenity given that the closest dwelling not associated with the development is approximately 450m away (proposed concessional lot) and landscape screening is proposed.

Therefore, it is considered that the amenity of the immediate locality will be significantly impacted by noise and loss of privacy and would result in a significant change in character in the locality.

Council has received a significant number of submissions that raise concern with the likely loss of amenity and change in character of the broader region as a result of the development. The SIA states "It is likely that these changes to the experiences of residents would be quite localised, and would decrease as properties are located further away from the most intensive operations. Such impacts to built-up urban areas, key tourist destinations and wilderness areas can likely be eliminated with an appropriate choice of flight paths that avoid these areas". Council observes that the likely impacts to the broader region is largely unknown in relation to noise impacts as there has been no assessment of the likely impacts of noise on the broader region, and that the proposal has not detailed the adoption of flight paths to mitigate these potential impacts. Further information provided by the applicant 18 October 2018 in the document "Flight Paths" (see Appendix 12) details that "there are no such things as designated flight paths for flight schools". Therefore it does not appear that there is any intention to adopt mitigating flight paths.

The SIA details likely loss of amenity to tourist destinations such as beaches and wilderness areas, "...where overflying by large numbers of aircraft would be expected to have significant adverse impacts on character and amenity". The document details opportunities to mitigate against such impacts including adoption of flight paths, however these mitigations are not reflected in the design of the proposal. In relation to the proposal to use flight paths to mitigate the impacts of the proposal, Council received submissions from the community detailing concern that the proposal to adopt flight paths would subsequently concentrate the impacts over rural land users, given that wilderness areas, tourism areas, towns and dwellings were prioritised for avoidance. Further, the proposal to use Merimbula Airport for up to 9,600 flight training circuits per annum would create likely impacts to the built-up areas of Merimbula (a residential and tourist area) that has not been assessed and that could not be mitigated by flight paths given its single runway.

Submissions from Eurobodalla Shire and East Gippsland Shire detailed concern with the proposed use of Moruya and Mallacoota Airports for flight circuit training at significant intensity with likely amenity impacts upon their surrounding communities. The application is relying upon these established airports without considering whether the impacts at those airports are satisfactory or welcomed by the airport operators. Council requested from the applicant letters of agreement from the airport operators, but these have not been forthcoming. Feedback received by Council from the airport owners (Appendix 4) details concern that the scale of circuit training proposed at those airports

would result in amenity impacts on the local communities. The airport owners detail that if this were the case the use of their airports by the flight school would be unwelcome.

In conclusion, Council considers that the flight school would result in significant amenity impacts upon the immediate locality. The SIA details loss of amenity upon the broader region as a result of overflying by large numbers of aircraft. Impacts beyond the extent of the Shire are likely to be significant as a result of the flight school's intention to undertake circuit training at six other airports, with significant increases to the flight movements experienced at those airports. Change of character in the immediate locality is certain, while change of character across the broader region is considered likely as impacts are felt upon rural, tourist, wilderness and coastal areas.

Biodiversity

The application was supported with multiple Biodiversity Assessment reports. A chronology of assessment is provided below:

Biodiversity Impact Assessment October 2017

The application was supported with a Biodiversity Impact Assessment (October 2017) which detailed that through a combination desktop assessment and site inspection carried out by an ecologist and technical assistant on 9 September 2017 over a period of approximately 1.5 hours, it was determined that the site contained a mixture of EEC Lowland Grassy Woodland with tree cover (10.82ha), EEC Lowland Grassy Woodland without tree cover (40.73ha) and exotic dominated vegetation (4.43ha).

The report detailed that it is likely that the south western corner of the site is in a condition to satisfy the criteria as a Critically Endangered Ecological Community under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). As no development is proposed in this area, further survey to determine if the community meets the EPBC Act criteria was not undertaken.

It was noted that grazing of livestock and the site's use as an airfield has contributed to degradation of the EEC, and that no threatened flora species were occurring or likely to occur at the site. The report detailed potential threatened species (predominantly birds but also flying-fox and bats) that may use the woodland as habitat. The presence of significant vegetation, being Broad-leaved Peppermint (*Eucalyptus dives*) trees was noted and mapped at the site.

The report indicated that of 5.67ha of clearing, approximately 0.87ha of EEC would be impacted and did not anticipate significant impacts.

The application was referred to NSW Office of Environment and Heritage (OEH) who supported that the recommendations be adopted.

They noted that both the derived grassland (no tree cover) and woodland component form the Lowland Grassy Woodland EEC, because the scientific determination for Lowland Grassy Woodland specifically states that "the community also includes "derived" native grasslands which result from removal of the woody strata from the woodlands and forests". An updated assessment of significance was recommended, noting that the early spring site inspection was not an ideal time for assessment. Further assessment relating to potential impacts upon raptor species from bird strike was also recommended.

Biodiversity Impact Assessment May 2018

In response to OEH's advice, an amended assessment was undertaken which noted that 6.76ha of EEC was likely to be impacted (a significant increase from 0.87ha). Some realignment of the road was undertaken to avoid impacts upon all but two broad leaved peppermint trees. A revised 7 Part Test of Significance was undertaken with consideration of the impacts upon the EEC and raptors.

Two new recommendations were provided to offset the impacts upon the EEC and to mitigate against the risk of collision with raptors.

The report was reviewed by OEH and the recommendations supported. OEH noted that raptors had been sited within 10km of the subject site and recommended the 7 Part Test of Significance be updated to reflect this. In addition OEH recommended the establishment of a Biodiversity Management Plan (BMP) and adopt the recommendation as conditions.

Importantly, the development plan set was amended to show the extent of proposed clearing, which was updated to include clearing at the western end of the east-west runway, however no further consideration was given to the EPBC Act criteria.

Biodiversity Impact Assessment July 2018

The applicant carried out a revised 7 Part Test of Significance and adopted the recommendations provided by OEH. The report revised the impacts upon EEC at 6.7ha, but continued to note that the likely impacts upon the EEC were not considered significant.

The application was referred to Council's Environmental Services Unit for comment and was considered in conjunction with the Onsite Wastewater Management reports. The referral notes:

- construction impacts to Broad-Leaved Peppermint trees have been resolved adequately,
- the revised area of impact to EEC (6.7ha) is substantially more than previously calculated,
- securing the protection of the endangered Lowland Grassy Woodland community outside the main development footprint will be an important measure to offset the proposed impacts. Importantly, if the condition of the vegetation is improved and maintained overtime through the vegetation management plan (VMP) the offset will be of greatest value. Ensuring an appropriate level of reporting and/or compliance triggers will be important to ensure its success,
- impacts upon biodiversity at other airports has not been considered in the application, and further assessment to determine impacts upon biodiversity at those other airports is required,
- concerns that onsite wastewater management could have long term negative impacts on the Lowland Grassy Woodland EEC if wastewater infiltrates these areas potentially undermining positive gains from the offset. The referral notes that it is well documented that high phosphorous and nitrogen levels can impact native grassland including grassy woodland communities reducing diversity and allowing exotic grasses to invade. With this in mind, some emphasis is required to mitigate and avoid these impacts through additional measures or modifications to the irrigation system. The Onsite Wastewater Management Plan has not addressed this issue adequately.

The referral goes on to surmise that irrigation of effluent over the runways could be an option to mitigate the impacts of nitrogen and phosphorous levels upon the EEC offset areas. However, alarm is expressed at the continued intent detailed in the application to irrigate effluent over the runway surface without first obtaining expert engineering advice that the quantity of water and resultant wet (and subsequently softer) surface would result in a hazard to the flight school aircraft and other aircraft which may wish to land or take-off from site. Council requested this expert advice during the assessment of the application, but it has not been provided. The competing issues have not been resolved satisfactorily and the updated OSSM report (Addendum 2) has not adequately addressed potential impacts to the EEC.

Impacts that have been identified in relation to native vegetation clearing at the site have been addressed through the Biodiversity Assessment Reports and the subsequent recommendation for establishment of an offset area on the site. However, the likely clearing impacts upon the EEC in the

south-western corner of the site have been underestimated due to insufficient consideration of CASA's advisory publication CAAP 92-1 (1) which details the physical requirements for Aeroplane Landing Areas. The RAA Operations Manual requires that the physical dimensions of the aerodrome comply with CAAP 92-1 (1). Therefore issues remain unresolved in relation to likely impacts upon EEC and insufficient information has been provided to assess the impacts upon the Endangered Ecological Community Lowland Grassy Woodland. Further, it is noted that the extent of further clearing in this area would trigger further assessment against both the NSW legislation and EPBC Act.

Bird Strike

The potential for impacts upon biodiversity as a result of aircraft collisions with avifauna (bird strike) has been raised by NSW OEH and in submissions. Concern was particularly raised in relation to the threatened species; Grey falcon, White bellied sea eagle, Spotted harrier, Little eagle and Square-tailed kite, all recorded within 10km of the subject site.

The applicant undertook further investigation and provided a risk-mitigation strategy detailing measures to restrict shelter and habitat provision for raptors and raptor prey. OEH provided further review of the application and advised that a Biodiversity Management Plan should be adopted.

The matter was addressed in the applicant's response to the submissions (Appendix 11) wherein it is detailed that an Australian Transport Safety Bureau study found that for General Aviation, the rate of reported bird strikes between 2006-2015 was less than 0.53 incidents per 10,000 movements. The applicant's response details that at this rate, less than one bird strike incident per year is likely to occur in association with the flight school. However this conclusion is inconsistent with the flight movements detailed to Council in the application (Appendix 8) which details that approximately 189,600 flight movements are proposed per annum, which would bring the likely bird strike rate up to 10 per year. Given that the majority of these flight movements are proposed to occur at other nominated airfields, opportunities to mitigate against these impacts are limited.

It has been assessed that there will be bird strikes from the operation of the flight school. It is considered that given the number of flight movements from the site and also at other airports the implementation of a biodiversity management plan would mitigate some impacts however would not totally negate bird strikes. Council considers that inadequate consideration has been given in the application to the potential impacts upon biodiversity from bird strikes occurring at other airports.

Air Pollution

The application was referred to NSW Environmental Protection Agency who advised that the proposal did not fall within any activities listed in Schedule 1 of the Protection of the Environment Operations Act (POEO Act) and an EPA license was not required.

The application was supported by an air quality assessment report prepared by GHD (Appendix 10). The air quality assessment considered emissions from aircraft based upon 330 take-off manoeuvres undertaken two minutes apart for a period of 11 hours. The model assumed emissions from six aircraft at any one time and measured emissions at non-affiliated surrounding residential receivers.

The modelled scenario predicted maximum ground level contaminants of identified pollutants at residential receivers. The identified pollutants included Particulate Matter, Nitrogen Dioxide, Carbon Monoxide, Benzene, Toluene, Xylenes and N-Pentane. The report established a criteria of maximum threshold concentrations averaged over a period of time, which the report details is based upon the NSW EPA's Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales. The modelled maximum concentrations were provided against the criteria for each pollutant and the modelled levels were found to be below the acceptable thresholds.

The report concludes that the predicted pollutant concentrations from the proposed aircraft emissions using worst-case inputs are low in comparison against EPA Approved Methods criteria and adverse impacts on humans are not predicted. The report concludes:

Air pollution that is known to impact vegetation and agriculture include particulates, flourides, sulphur dioxide and ethylene.⁴ The proposal is not a significant source of these pollutants. Possible effects of identified air pollution to the agricultural land and vegetation are secondary damage in the form of minor distresses in their growth but can only take effect at high concentration level.⁵ The predicted concentration levels are very low and adverse impacts on any local vegetation or agricultural land are not anticipated.

Therefore Council does not have concerns with the potential for emissions from the aircraft causing significant pollution impacts upon adjacent land users. It is not considered likely that emissions from the flight school would result in significant impacts upon soil or waterways. Council observes that the report did not provide comment in relation to criteria for organic certification.

Water Pollution

Chemicals and bulk unleaded fuel are proposed to be stored on site. Restrictions could be applied, consistent with similar fuel storage facilities including service stations and transport depots, to ensure that should spills occur the site would be adequately designed to ensure proper capture and disposal of polluting substances.

The applicant proposes to irrigate disinfected treated effluent over the site. Council has reviewed the OSSM and considers that adequate buffers to catchment areas are provided.

Potential pollution of waterways from aircraft emissions has been addressed in an air quality assessment report which advised that emissions from aircraft operating in the Frogs Hollow locality would not be significant enough to concentrate effects upon native vegetation and agricultural land. Likewise it is unlikely that there would be any significant impacts upon waterways.

Height of operations over private property and public roads

Concern has been raised that use of runways 09 and 27 will necessitate flying over private property at less than 500ft above ground level (AGL) during the take-off manoeuvre and that this is not legal. Civil Aviation Order (CAO) 95.55 Cl. 8.1 - 8.3 provides clarification of when it is permissible for an aircraft to fly at less than 500ft AGL. 8.1(a) details that the "...aeroplane may be flown at a height of less than 500 feet above ground level if: (a) the aeroplane is flying in the course of actually taking-off or landing". Therefore the legislation appears to make provisions for aircraft to fly over private property at less than 500 feet AGL in certain circumstances. However it is noted in Cl. 8.3 that the aeroplane must "...during the take-off or landing, maintain a horizontal distance from a place or person mentioned in subparagraph 8.2(a), (b) or (c) that may be less than 100 metres if the distance is: (a) enough to avoid endangering any person or causing damage to any property; and (b) as far as possible from the place or person, to carry out a safe take-off or landing".

Concern has been raised in relation to potential safety impacts of overflying aircraft upon traffic using the Princes Highway. CAO 95.55 Cl. 8.2 provides:

For subparagraph 7.1 (b), except when taking-off or landing, a relevant aeroplane that is flown at a height of less than 500 feet above ground level must be at a distance of at least 100 metres horizontally from:

(a) a public road...

The matter was raised with NSW Roads and Maritime Services who requested the following information:

- Details on the maximum number of flights (for each stage of the development) that will result in crossing of the Princes Highway; and
- Details on what the minimum heights will be at each crossing point of the Princes Highway.

- Details on what measures will be put in place to ensure flights that cross the Princes Hwy (e.g. under 500ft) do not result in a distraction to drivers.

The applicant has provided an assessment of the long-term average wind records to determine likely runway usage (Appendix 18). They advise that the runways would be used at the following proportions:

- Runway 36: 61%
- Runway 18: 30%
- Runway 09: 5%
- Runway 27: 2%

Runway 36: The report details that use of circuit 36 would not result in crossing of the highway.

Runway 18: The report details that use of circuit 18 would require crossing of the highway at two points, once at 1,000ft and once at 650-700ft.

Runway 09: The report details that use of circuit 09 would require crossing of the highway at two points, once at 500ft and once at 1,000ft.

Runway 27: The report details that use of circuit 27 would require crossing of the highway at two points, once at 1,000ft and once at 500ft.

In summary, the report details that based on long term wind averages, there would be approximately 15 crossings of the highway at 500ft per flying day at Stage 9.

The information was provided to NSW RMS for consideration and at the time of completion of Council's assessment, a response from RMS had not been received.

Construction impacts

It is considered likely that construction of the runway underpass and bridge would impact upon other users of the airfield, and would put the runway and access road out of commission for some time while the works are completed. Roadworks to upgrade the intersection treatment to the Princes Highway would likely create some short-term inconveniences to traffic.

Regulatory Framework

Concern has been raised in submissions regarding the regulatory framework surrounding the development and Council's ability to regulate the proposal. Council has outlined the framework below and provided comment on this matter.

The Civil Aviation Safety Authority (CASA) provides for three classifications of aircraft operations: passenger transport, aerial work and general aviation. General Aviation (GA) encompasses aircraft activities which are considered private, recreational or sport in nature. On its website CASA notes that GA includes flight training activities associated with sport aviation.

Civil Aviation Orders (CAO) 95.10, 95.32 and 95.55 require flight training schools to be operated in accordance with the Recreational Aviation Australia (RAA) Operations Manual. RAA is one of nine organisations authorised to self-administer sport and recreational flying activities on behalf of CASA. RAA operates via exemptions and delegations but is subject to oversight by CASA.

Within the aviation sphere, Frogs Hollow airfield is defined as an Aeroplane Landing Area (ALA). CASA has advised Council that CASA's aerodrome regulations do not extend to uncertified or unregistered aerodromes such as Frogs Hollow, however CASA has published an Advisory Publication CAAP 92-1(1) Guidelines for Aeroplane Landing Areas which details restrictions around the use of ALAs, types of operations that may be conducted from an ALA, and recommended minimum physical characteristics of ALAs. The RAA Operations Manual details that in the case of

ALAs, the physical dimensions of the aerodrome should comply with this publication. Council's assessment of site suitability has considered this publication.

Airservices Australia is an Australian Commonwealth entity that reports to the Minister for Infrastructure and Transport. Their website states that they provide a host of traffic control and related airside services to the aviation industry including responding to community concern about the impacts from aircraft and managing aircraft noise. However, in response to Council's referral it was advised that "Any noise regulation, restrictions on surrounding land and on the operations at the airport to manage noise may be set by council. Airservices is not involved in setting these restrictions as this is outside of Airservices jurisdiction". This is because Frogs Hollow ALA is not a federally leased airport or registered aerodrome.

The application was referred to NSW Environmental Protection Authority (EPA) who advised "Noise from aircraft on the ground (not taxiing, taking off or landing) can be directly controlled through the POEO [Protection of the Environment and Operations] Act provisions". The letter infers that the POEO Act does not extend to regulation of aircraft taxiing, taking-off, landing or in the air.

Therefore, based upon the advice received from EPA and Airservices Australia, any restrictions that Council wishes to place on the flight school would need to be captured as conditions of consent under the provisions of the Environmental Planning and Assessment Act 1979. Regulation of aircraft in the air beyond the pathways provided for within this Act does not appear to be available to Council.

Compliance with Civil Aviation Advisory Publication (CAAP) 92-1 (1)

The application was referred to CASA, who advised that

CASA's aerodrome regulations do not extend to uncertified or unregistered aerodromes such as Frogs Hollow. Therefore, CASA does not have any concerns regarding the amendment to the development application as presented.

We would however recommend that any development of runways and taxiways at Frogs Hollow take into consideration our Advisory Publication CAAP 92-1 (1)... ..for the establishment and operations of an Aeroplane Landing Area (ALA).

CAAP 92-1 (1) is an advisory publication issued by CASA (see Appendix 2). In the publication it is detailed that "There is no legal requirement to observe the details set out in this publication" and refers the reader instead to the Civil Aviation Regulations (CAR) 92 (1), 93, 233 and 235: Civil Aviation Orders; and the Aeronautical Information Publication for legal requirements. Exemption from the provisions of the Civil Aviation Regulations 1988 – Certain Ultralight Aeroplanes Instrument 2018 does not repeal the above clauses of the CAR.

The applicant has advised that CAAP 92-1 (1) has been considered in the design of the development but that the publication is advisory only. The RAA Operations Manual (Section 3.01) requires that the Chief Flying Instructor must ensure that the aerodrome complies with a minimum criteria, including:

- a. The take-off and landing distance available in the prevailing conditions, is equivalent to the Flight Manual or the manufacturers calculated or stated distance requirement, plus 30%;*
- b. The surrounding topography must be such that a standard circuit for the aeroplane type can be flown;*
- c. There must be sufficient clear ground in the vicinity of the aerodrome that a successful forced landing, in the case of an engine failure, may be expected;*
- d. If the aerodrome is classified as uncertified the physical dimensions of the aerodrome should comply with "LANDING AREA - AEROPLANES" CASA CAAP 92 – 1 (1);*

- e. The aerodrome is serviceable;*
- f. There is a method of determining the wind direction and velocity at the aerodrome; and*
- g. If required, the owner or operators written consent has been given for the use of the aerodrome.*

Officer's Comment on CAAP 92-1 (1) requirements

The RAA Operations Manual clearly states that compliance is a matter for the Chief Flying Instructor, however given the magnitude of the scale of the proposal Council has concerns that should the runways not physically comply then subsequent vegetation clearing or construction requirements will not have been given due consideration. An assessment against CAAP 92-1 (1) is considered appropriate at the development application stage with regard to determining site suitability and the likely environmental impacts. Further, there is the matter of feasibility of the scale of the development to be considered in relation to site suitability. Therefore Council has provided an assessment against this requirement.

Item a: Complies. The applicant has advised that the Trike requires the greatest take-off distance at 247m over a 50ft obstacle, according to the manufacturer's specification. Both runways are longer than 321.1m ($247 + 30\% = 321.1\text{m}$) at 1,000m (north-south) and 850m (east-west).

Item b: Complies. The topography allows for a standard circuit to be flown.

Item c: Council Officers note the presence of undulating and vegetated land inclusive of large eucalypt trees in close proximity of the subject site. It is considered that the applicant has not adequately demonstrated how this criterion has been met.

Item d: The physical dimensions outlined in CAAP 92-1 (1) for this development type are detailed in Section 5 of the publication.

5.1 Runway Width: The publication details that a runway "minimum width of 15m is recommended although aeroplanes with a MTOW below 2000kg can be operated safely on runways as narrow as 10 metres provided there is only light cross-wind". A 10m wide runway is proposed.

Further information received by Council 18 October 2018 (Appendix 13) indicates that flight training is not only proposed in light cross-wind, but that flight operations may occur in cross-winds up to 15 knots (25.93 km/hr), which according to the Beaufort Wind Scale is considered a "moderate breeze".

It is also noted that aircraft not associated with the flight school with a MTOW greater than 2,000kg or more than one engine may wish to use Frogs Hollow ALA from time to time, and the SOEE Addendum has indicated that the airfield would remain open for other aircraft not associated with the flight school.

Therefore, further justification is required as to why a wider runway of 15m in accordance with the CAAP 92-1 (1) publication has not been adopted.

5.2 Runway Length: "...a runway length equal to or greater than that specified in the aeroplane's flight manual or approved performance charts or certificate of airworthiness, for the prevailing conditions is required (increasing the length by an additional 15% is recommended when unfactored data is used)".

Both north-south and east-west runways comply with these requirements.

5.3 Longitudinal Slope: "The longitudinal slope between the runway ends should not exceed 2%, except that 2.86% is acceptable on part of the runway so long as the change of slope is gradual".

The longitudinal slope of the two runways from end to end, as drawn on the plan, complies at approximately 0.5%. However sections of the north-south runway do not comply. At one section of

the runway, there is a 5m change in level over a length of 140m, resulting in a 3.5% slope. Therefore, works to the north-south runway are required.

5.4 Transverse Slope: "The transverse slope between the extreme edges of the runway strip should not exceed 2.5% or 12.5% upward slope over the fly-over area".

Various sections of the runways do not appear to comply with this clause. In some sections the transverse slope is as great as 3.3% on the east-west runway. Therefore, works to the runways are required.

5.5 Other Physical Characteristics: Both ends of a runway, not intended solely for agricultural operations, should have approach and take-off areas clear of objects above a 5% slope for day and a 3.3% slope for night operations. Other recommended landing area physical characteristics are shown on the following diagrams:

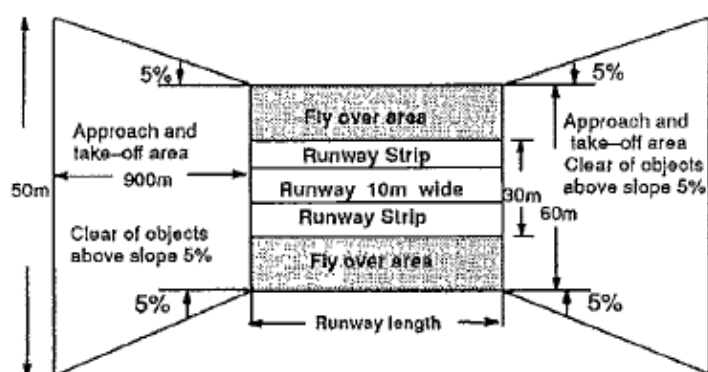


Figure 2A - Single engined and Centre-Line Thrust Aeroplanes not exceeding 2000 kg MTOW (day operations)

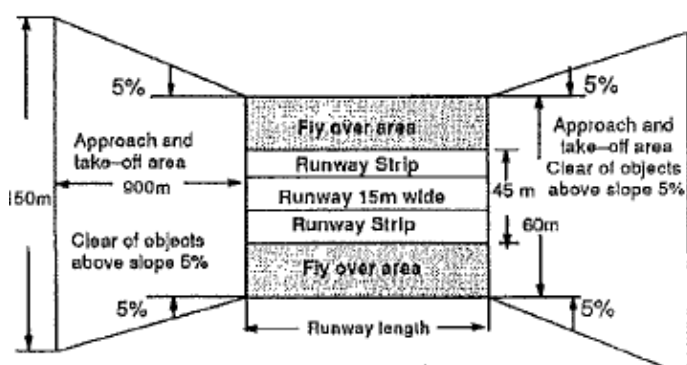


Figure 2B - Other Aeroplanes (day operations)

Figure 7: Excerpt from CAAP 92-1 (1)

Figure 2A (which has been adopted in the plan set) requires a distance of 900m beyond the runway (and laterally 5%) to be clear of objects above a slope of 5%. This means that a 20m high object would require a clear area of 399m beyond the end of the runway, or, over a 399m distance, clearing of vegetation would need to extend, in a triangle shape, a further 20m wide of each side of the runway.

Given the presence of EEC (Lowland Grassy Woodland) at the western end of the east-west runway it is not clear how this requirement has been met. The applicant proposes to clear the EEC over the designated area of the east-west runway and taxiway as shown on the Development Plan, but clearing beyond or adjacent to the runway has not been detailed or proposed, and it is noted that the woodland (replete with tall trees) continues onto adjacent land that is not proposed to be acquired by the proponent.

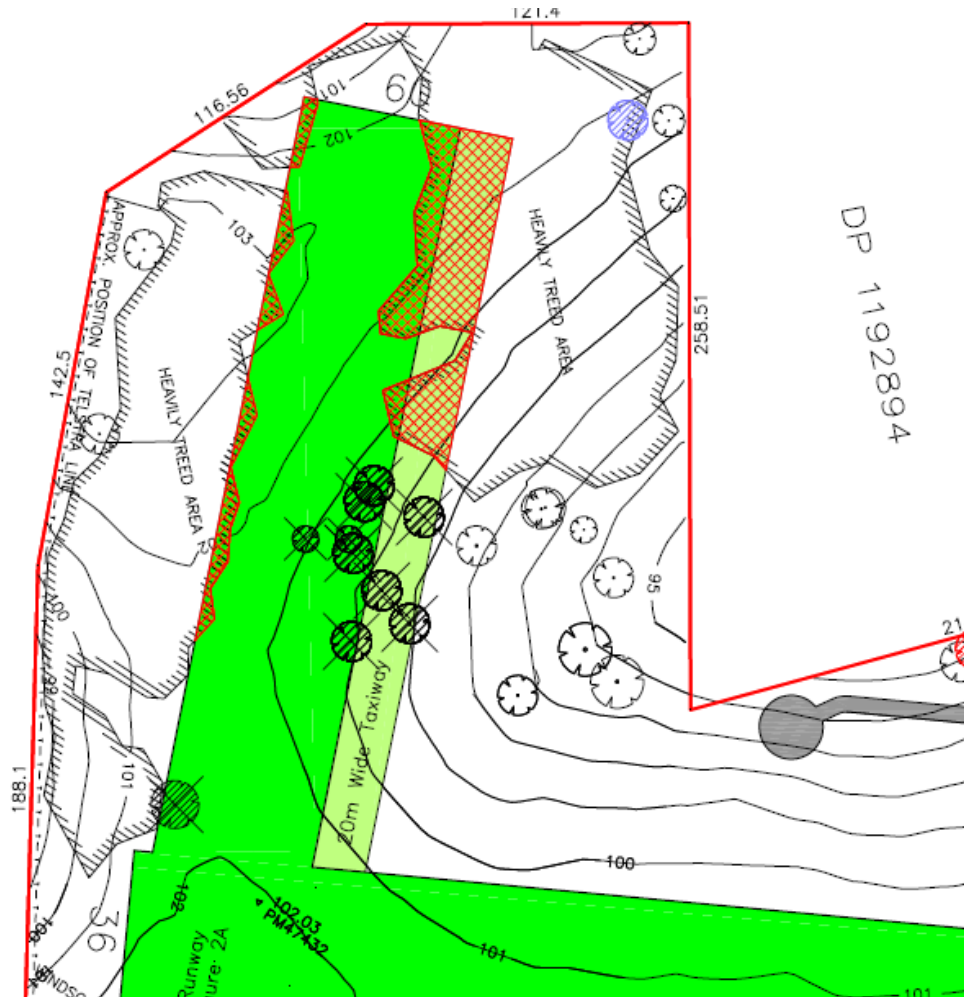


Figure 8: Excerpt from plan set detailing proposed vegetation clearing adjacent to east-west runway (runway 27)

Therefore Council Officers are not able to confirm that the application complies with this part of CAAP 92-1 (1), and it has not been adequately demonstrated that runway 09 and 27 can be used for the proposal.

The site plan was considered by Council's Development Engineer in relation to the requirements of CAAP 92-1 (1) and non-compliance with the maximum longitudinal slope and maximum transverse slopes were noted. Further comments were provided in relation to sight-lines on the runway:

I have sketched a scale long section of the proposed runway (search CM under "long section") and found that the change in grade toward the northern end presents a situation where an aircraft at the low point will not be able to see an aircraft that is 400m south and vice versa. Given the reliance on pilot vision for controlling aircraft movements (rather than a control tower) I think this situation presents a significant safety hazard. I believe the runway will need some amount of regrading and it is possible that some fill will need to be imported.

Consequently the proposal to use the runways without undertaking further works is inconsistent with the Civil Aviation Advisory Publication.

Item e: The site is currently in use by the Frogs Hollow Flyers, indicating that it is serviceable (ie. usable). However current usability of the shorter east-west runway is not certain. Submissions and conversations with various stakeholders have brought Council's attention to the limitations of runways 09 and 27 in their current state due to the proximity of tall trees, some of which are proposed to be cleared as part of this application.

Item f: Complies. There is a wind sock at the site.

Item g: Complies. The applicant proposes to purchase the subject site.

The site does not conform to the physical dimensions required by CASA's advisory publication. In order to make the site conform, further works and clearing would be required over the subject land. Potentially, additional clearing would be required over adjacent land that does not form part of the development application and is not proposed to be purchased by SAFCA. Council concludes that the application does not adequately demonstrate that the site is suitable for the proposed development. Further, given that the entirety of the site is identified as Endangered Ecological Community (EEC) – Lowland Grassy Woodland, the full extent of impacts upon the EEC have not been adequately considered or detailed in the Biodiversity reports (Appendix 7D and 7E).

Biosecurity

The application was referred to Council's Vegetation Management Officer who raised concern with the potential for weeds (particularly African lovegrass) to be spread. He noted that under the Biosecurity Act 2015 everyone has a General Biosecurity Duty. "Any person who deals with biosecurity matter or a carrier and who knows, or ought reasonably to know, the biosecurity risk posed or likely to be posed by the biosecurity matter, carrier or dealing has a biosecurity duty to ensure that, so far as is reasonably practicable, the biosecurity risk is prevented, eliminated or minimised." A "carrier" being defined as "Anything (whether alive, dead or inanimate, and including a human) that has, or is capable of having any biosecurity matter on it, attached to it or contained within it". i.e. earth moving machinery.

To fulfil the applicants' "Duty" Council would insist measures to minimise the potential African lovegrass spread be;

- Any earth moving or removal of seed infected soil being taken off site not be spread to clean areas of the shire.
- Keeping a buffer zone free of African lovegrass 3 meters either side of entry and exit roads

This measure would be enough to satisfy the applicant's Biosecurity Duty regarding priority weeds listed in the South East Regional Strategic Plan, in order to prevent any material removed from the site to end up in a clean African lovegrass free locality.

Landscape Plan

The application was not supported with a detailed landscape plan, however a concept landscape screening was provided. A landscape plan detailing inclusion of locally occurring indigenous species appropriate to the EEC Lowland Grassy Woodland is required.

Drainage/hydrology/watercourses

The application proposes to install 10 Ozzi Kleen SK25 A-G sewage treatment plants to service the development. The effluent water is proposed to be disposed of through a combination of methods, including surface spray irrigation over the runways, absorption trenches, and landscape effluent irrigation area.

The application has been reviewed by Council's Environmental Health Officer and Environmental Services Unit who have noted unresolved competing issues in relation to: preservation of EEC offset areas not impacted by infrastructure; preservation of runway integrity for the diversity of aircraft that may wish to use the runway for taking-off and landing; and space to dispose of the estimated volume of effluent water.

Impact on adjoining land and the locality

It has not been adequately demonstrated that the proposal will not create conflict with agricultural uses in the immediate area. Concerns raised in submissions detail potential noise impacts on beef and sheep grazing, dairy herds in the area and potential contamination of land and waterways from exhaust pollution from the aircraft. These matters, specifically relating to livestock productivity and quality, training circuits being conducted over Wolumla Creek, and potential pollution of agricultural land, were raised in a referral to NSW Department of Primary Industries (DPI). The response Council received was inconclusive as it did not take into consideration the scale of the proposal, proximity to livestock, or size of aircraft, and provided general advice only (see Appendix 2).

The advice suggested that livestock would likely be "spooked and flighty" at first, but that with time would likely cope with the noise if regularly exposed. The advice stated that "if the cows are within the immediate proximity to the planes (i.e. in the same paddock), they may not settle due to the continuous disturbance". Flight circuits are proposed to be flown over adjacent beef and sheep grazing land and on some occasions will likely be lower than 500ft altitude but it is not proposed to graze cattle within the immediate proximity to the planes (ie. within the subject site).

The application was supported with an Air Quality Assessment which concluded that any impacts upon surrounding land users as a result of aircraft emissions would be below acceptable threshold levels prescribed by the EPA.

NBN Co. initially raised concern with the proposal during the advertising of the application, given the site's proximity to the NBN Satellite Earth Station (SES) at Wolumla. Their concerns related to the potential for the aircraft to interfere with the operation of the SES at Wolumla, with potential impacts on the provision of NBN satellite services. More specifically, NBN raised concern about the potential for radio interference from the airfield and physical interference from aircraft flying through the radio frequency signal beam from the SES antenna array. The SOEE Addendum was subsequently referred to NBN Co., with no further comment received.

The noise assessment report does not provide adequate information to demonstrate that the likely noise impacts of the development are acceptable. The wide spaces usually available on rural zoned land to provide buffers between conflicting land uses are not available in this instance, given the physical extent of the flight circuits which are proposed to be flown over neighbouring land parcels and residents' homes at significant intensity.

It is not only noise impacts that are of concern to surrounding residents. Concerns relate to potential pollution of roof-caught tank water (sole supply of domestic water), privacy impacts of a significant number of flights occurring overhead at reasonably low-altitude (between 150m and 300m in combination with the use of Go-Pro cameras capturing the flying experience), and reduction in rural amenity experienced by surrounding residents.

Given the scale of the proposal and the extent of the designated training area, plus the proposed use of other airports for flight training, it is anticipated that the impacts of the flight school will be experienced at a significant level well beyond the extent of the subject site, and into other adjoining land zones. The Socio-Economic Impact Assessment report confirms this scenario and notes likely noise and amenity impacts upon wilderness areas, urban areas and coastal beaches.

Airport Practice Note 6: Managing Bird Strike Risk Species Information Sheets released by the Australian Airports Association (AAA)¹ provides land use planning guidance in the vicinity of

aerodromes. The publication details uses within a 3km radius that are incompatible with aerodromes due to their propensity to attract birdlife, which can become an unacceptable risk to aviation. The report details that piggeries and orchards are incompatible uses within 3kms of aerodromes. Council observes that the land surrounding the subject site is predominantly rural land and that piggeries and orchards are activities that would be associated with agricultural lands, and that establishment of a flight school of significant scale in this location may prevent these types of activities being established in the locality in the future.

¹ https://www.atsb.gov.au/media/5353201/managing_bird_strike_risk_species_information_sheets.pdf

Visual Impact

Currently the site is not visually prominent given the low density of development and its location approximately 300m at its closest point from the nearest connecting road, the Princes Highway. The site currently is akin to a rural farm in density and visual impact. However the site, particularly the north-south runway, is visible from the Princes Highway and further development of structures will increase its prominence in an otherwise low density rural environment.

Consideration of visual impact of the proposal is considered necessary, particularly given that at Stage 9 the proposal will result in the construction of a total of 104 buildings, lining each side of the north-south runway for a distance of approximately 850m. Elevations indicate a basic utilitarian shed-type construction for each of the structures. It is considered that the density of development proposed is not consistent with the existing character of the locality.

In support of the application, a visual impact assessment has been undertaken by Urbaine Architecture (Appendix 14).

The report notes the current low density of development in the pasture lands of Frogs Hollow and details the key view points to the subject site from public roads. Although the application was not supported by a schedule of colours and materials, the visual impact assessment nominates a green colour for the buildings to lessen their impact in the landscape. It is not clear whether the green colour is reflective of available bonded steel colour palettes. It is agreed that the green colour palette has the effect of lessening the visual impact.

Photo montage views are provided showing additional landscaping, which has the effect of further lessening the visual impact from the Princes Highway.

The associated written statement draws the conclusion that with the appropriate colour palette and landscaping to the eastern side of the site the visual impact can be adequately mitigated.

The view assessment from the western side of the site draws the conclusion that there is no need for landscape screening because the existing trees break up any observable building mass. While this may be the case at the present time, it is considered that mitigation of visual impact should not rely upon remnant vegetation on adjacent land, and therefore landscape screening should be consistently applied to both eastern and western sides of the site, with ongoing performance conditions relating to maintenance of screening.

Additionally, it is unlikely that the bonded steel colour will blend into the landscape to the degree shown in the photomontage. Invariably, the eye will notice a line of hard structures in a natural landscape, and therefore landscape screening on both eastern and western sides of the site is considered warranted.

No detail has been provided regarding the visual impact of possible relocation of the existing sheds and structures.

Visual Impact of Aircraft

An assessment of the visual impact of aircraft flying training circuits beyond the site boundaries and over private property has been undertaken.

The applicant submitted an assessment of the visual impact of the aircraft flying at 4000ft. The perceived size of the object was calculated as though the person were holding a ruler 30cm in front of them and measuring the size of the object, at which point the aircraft would be perceived as 2.5mm in size. It is considered that context would be an important consideration in whether the impact is satisfactory or not. In an urban or rural context, the visual impact would not likely be significant, however in a wilderness area the repetitive sighting of aircraft may detract from the wilderness experience.

The assessment did not consider the perceived size of the aircraft at 500ft at which height it may be flying over a nearby residence. Using the same equation ($x/\text{distance 1 (30cm)} = \text{object size (10m)}/\text{distance 2 (152.4m)}$), the perceived size at 500ft (152.4m) measured 30cm from the eye would be 2cm.

Therefore, it is considered that the visual impact from aircraft flying overhead at the proposed height would be satisfactory in a rural or residential context. However this would likely not be the case in a wilderness setting (such as Mallacoota).

Note: no conclusions have been drawn in relation to perceived privacy impacts. Privacy impacts have been considered earlier in this assessment.

Boundary Treatments

No detail has been provided in relation to fencing of the site for security or safety, such as exclusion of fauna such as kangaroos. If required, security fencing would need to be considered in the context of its visual impact to the Princes Highway, and may need to be set back from the site boundary. Any fencing of the site over and above the exempt provisions would need to be the subject of a separate development application.

Social and Economic Impacts in the locality

A detailed assessment of the social and economic impacts has been provided under Section 4.15(1)(a)(iii) of this assessment. The application has not demonstrated that the social and economic impacts are satisfactory.

South East and Tablelands Regional Plan

The application was considered having regards to the South East and Tablelands Regional Plan - Regional Goals applicable to the proposed development.

Regional Goal: A connected and prosperous economy

- Direction 9: Grow tourism in the region
 - o Action 9.2: Encourage tourism development in natural areas that support conservation outcomes

The Regional Plan supports the growth of tourism in the region. It states:

To capitalise on increased visitation from Asia, the region will showcase its clean and green reputation through locally grown produce from providores and farm gates. The variety of experiences can be expanded through the sustainable use of national parks, Crown Lands, agricultural lands and other assets. This can attract people interested in nature- and eco-based experiences, agri-tourism, adventure experiences (such as canoeing and mountain biking) or arts and cultural activities such as those offered on the Bundian Way.

The SOEE Addendum categorises the proposed flight school as a tourism industry. Council notes that the definition of a tourist is a visitor staying less than 12 months (amongst other criteria). Therefore the flight school students are able to be categorised as tourists. Classification as a tourism venture is made from technical application of the widely accepted definition of tourism business that approaches from the demand side (rather than the supply side). If an organisation is providing goods or services to a tourist then the business is a tourism business (this does not exclude them from also being classified as other business types). Council observes that although the applicant has demonstrated that residents from China would be able to attend the site, the intent is for use as a flying school.

Further, the proposal is not consistent with the action where it requires the venture to "...support conservation outcomes". The proposal does not fit into the range of sustainable "nature- or eco-based" tourism activities endorsed and encouraged by the regional plan.

Regional Goal: Healthy and connected communities

- Direction 23: Protect the region's heritage
 - o Action 23.3 Conserve heritage assets during local strategic planning and development.
 - o Action 23.5 Acknowledge cultural heritage assets where appropriate, and consider how these assets can add value to a development.

Consideration of Aboriginal archaeology has been considered in the assessment of this application. The application was supported with an Aboriginal Due Diligence Assessment which was undertaken in consultation with the Bega Local Aboriginal Land Council. The report advised that there are "...topographic elements present in the study area, and that would be disturbed by the proposed development that have moderate to high archaeological potential". The report recommended further investigation in the form of an Aboriginal Cultural Heritage Assessment with a view to undertaking test excavation in the development footprint (buildings and new internal road). The ideal timing for these works to be undertaken was not a feature of the report, however advice received by Council from NSW Office of Environment and Heritage (OEH) provided that the further investigation works be undertaken prior to development consent to allow the best opportunity to mitigate potential harm. The applicant was provided with this advice and chose to not undertake any further works. Council observes that OEH's advice was reiterated by the Bega Local Aboriginal Land Council in their referral advice.

Although the applicant has undertaken a due diligence assessment, further actions to protect and conserve heritage assets and consider how these assets could add value to the development have not been carried out.

Regional Goal: Environmentally sustainable housing choices

- Direction 28: Manage rural lifestyles
 - o Action 28.3: Manage land use conflict that can result from cumulative impacts of successive development decisions

Immediately to the south-east of the existing airstrip is located a recent (2014) 19-lot rural residential concessional lot subdivision. Additional rural residential lots are located to the east of the Princes Highway. It is likely that the residents of these parcels will experience amenity impacts from the proposal. Opportunities to mitigate these impacts are very limited as it is proposed to undertake flight circuit training at the subject site, and the proposed flight circuits overfly private property including some residents' homes at 500-1000ft.

The proposal is not consistent with the above goals and directions of the Regional Plan. The development would impact on existing tourist operations within the Bega Valley due to noise

generated by airplanes overflying Forests, beaches and agricultural lands. No effort has been undertaken to protect and conserve Aboriginal cultural heritage that may exist within the site. It has been identified that the proposal would impact on surrounding land users.

Section 4.15(1)(c) the suitability of the site for the development

Visual Meteorological Conditions (VMC)

The application proposes to undertake flight training under VMC only and proposes flight operations from February through November. CASA defines VMC as: “an aviation flight category in which visual flight rules (VFR) flight is permitted—that is, conditions in which pilots have sufficient visibility to fly the aircraft maintaining visual separation from terrain and other aircraft”.

An intense regime of flight training is proposed with operations commencing at 7am and continuing through to 6pm for 150 days of the year. Concern is expressed with the feasibility of undertaking the highly regimented schedule in the context of winter sunrise and sunset times.

On the winter solstice (21 June) the Australian Government website Geoscience Australia indicates that sunrise occurs at Bega at 7:43am and sunset occurs at 5:21pm, with civil twilight occurring at 7.14am (rise) and 5.50pm (set), which is a slightly shorter day than the Operations Summary allows for. Although not significant periods of time, given the highly regimented schedule of flight movements required, the time difference will impact no less than 5 pilots in the morning flight session and 4 pilots in the afternoon flight session.

Therefore the operations summary does not demonstrate a schedule of flight training compatible with the constraints of the site.

Suitability of the development for flight training given meteorological/weather conditions

Submissions received by Council indicate that the site is subject to meteorological conditions such as wind and fog. Council has obtained information from the Bureau of Meteorology that identifies clear predominate summer to winter wind directions and mean speeds, however this information is restricted to 9am and 3pm readings taken in Bega. The application has not provided a review of wind gusts between the hours of 9am and 3pm, or detailed the impacts of rain or fog on flying days, to give a clear and identifiable assessment of available safe flying conditions available to learning recreational pilots.

Council received submissions objecting to the application citing that a proposed development of this magnitude and intensity could not be successfully run at the Frogs Hollow ALA due to the meteorological conditions experienced at the site.

A review of the information provided in submissions and information provided by the applicant indicates that the development application has not adequately addressed the meteorological conditions of the site, or how the proposed scale of flight training operations can be adequately performed at the site or at other airports that would support the proposed flight school.

Information was requested from the applicant detailing the site's weather conditions. In assessing the capability of students to learn to fly at Frogs Hollow, weather conditions are an important factor in considering the suitability of the site at the intensity and scale that it is proposed to operate.

The application details that there are 22 available flight training days each month, of which 15 would be used for flight training. In the document Operational Wind Conditions at Frogs Hollow Airfield (Appendix 13) it is identified that flight training can occur with wind speeds up to 20 knots (37.04Km/hr) wind velocity at 45 degrees to the runway in use, this being a cross-wind component of 15 knots (25.93Km/hr) for the Bantam B22 (the designated aircraft to be used). This is the worst case scenario.

This calculation was supported by the flight manufacturer who confirmed that the Bantam B22 maximum demonstrated cross-wind component (in knots) in the Pilot Operating Handbook is the figure at which factory testing has shown that directional control can still be maintained being 15 knots or 25.93km/h. They further provided comment detailing that, "It shall NOT require exceptional skill by an ordinary pilot, however it does not mean every pilot will be able to do so."

Further, a recurring notation in multiple Pilot Operating Handbooks for the Trike (which is another form of recreational aeroplane proposed to be used at Frogs Hollow) states; "The skill of the pilot and the "quality" of the wind must be taken into account when assessing conditions for flight, for example, a new pilot with minimal exposure to thermic and/or gusty conditions may find flight conditions more appropriate in smooth consistent light breezes with little to no gust; while a pilot with many hours experience of flying in rough conditions may assess conditions of moderate winds with varying gust to be within his and the aircraft's abilities." Therefore, although the upper limit of 15 knots crosswind applies to the Bantam B22, it is not certain that it would be safe for a student pilot to fly the aircraft in those wind conditions.

The information provided by the applicant detailed the suitability of wind speeds in Bega at 9am and 3pm and highlighted that wind speed was appropriate and below the upper limit of the wind velocity of around 20 knots (37.04Km/hr) at 45 degrees the majority of days. Council notes that these readings are only based on wind speed averaged over 10 minutes prior to those designated times and do not take into consideration the broader range of wind velocities measured throughout the day.

In determining that the site was not suitable, the submission received by Council considered an upper wind limit of 12 knots based upon a web article published in 1998 by Bruce Landsberg, Senior Safety Advisor for the Aircraft Owners and Pilots Association in the United States¹. The upper limit of 12 knots did not consider the T-shaped runway or the cross-wind component.

Council undertook a review of the BOM Daily Weather Observations over the past 14 months excluding December and January (not proposed to undertake flight operations) for the Bega weather station and noted that there are numerous days where wind gusts would exceed the safe wind speeds for operations based upon the upper limit of 20 knots.

A review of the maximum wind gusts for each day demonstrated regular exceedances of 20 knots, however this figure only provides the maximum figure for the 24 hour period, and not the detailed half-hourly wind speed observations between the hours of operation proposed by the development. It should be noted however, that when maximum wind gusts were recorded, they are predominately between the hours 8am and 5pm, during the proposed flight training hours.

A review of wind roses over the same months for Bega highlighted the predominate wind directions and forces, however, these were only limited to 9am and 3pm and do not provide an overall weighted average during the proposed hours of operation of the flight school.

There is insufficient information provided by the applicant to scientifically assess the impacts of winds during proposed flight training times. Concerns are raised that the proposed 15 days of flight training per month would be inadequate to accommodate the full schedule of flight training due to unsatisfactory flying conditions, and instead it is likely that the flying days would need to increase beyond the designated 15 days most months.

The applicant identified that excluding weekends, there are typically 22 flying days available for flight training (see Figure 9 below). This means that there are a further 7 days per month (beyond the 15 designated days) provided to accommodate inclement weather. Given that each flying day is scheduled with an aircraft either taking off or landing every two minutes for the most part of the flying day, it is likely that flight operations will be typically spread over more than just the 15 designated flying days to allow for the pattern of high winds that occurs at the site through the day. This would alter the experience of surrounding residents, with students undertaking flight operations across part-

days, rather than the flight training being condensed into a neat 15 days. Therefore the number of flight days has been understated. Further, the applicant has provided no reasonable information having regard to the impact of other weather conditions that would affect flight operations including poor visibility such as low cloud or fog (which has been raised in several submissions as a feature of the locality).

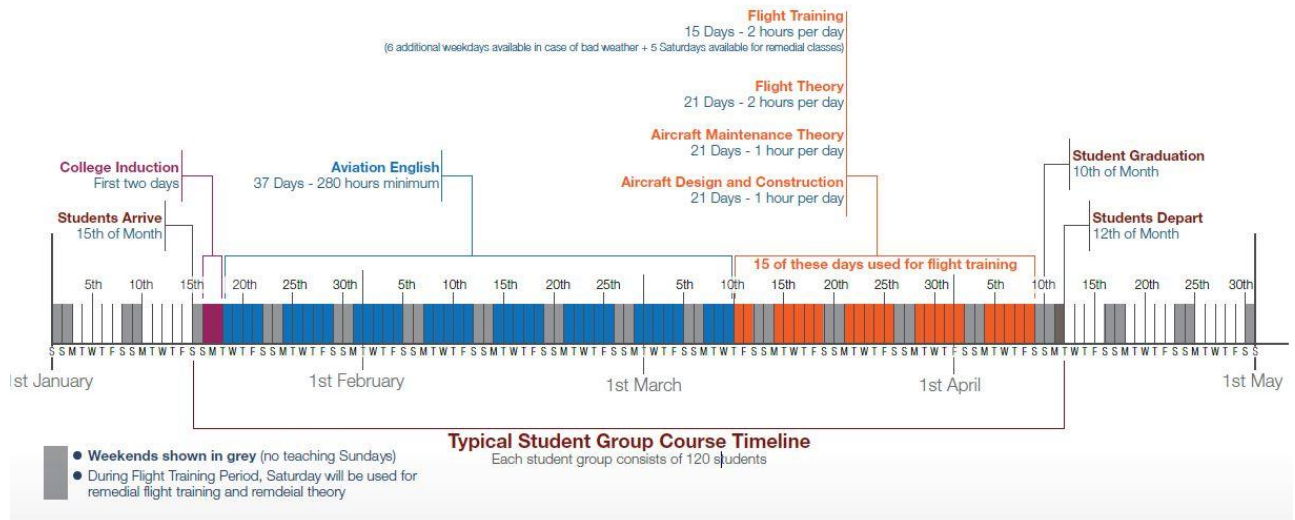


Figure 9: Typical course timeline (excerpt from Appendix 7P - Operations Summary)

The BOM information for Bega does not provide any recent daily or monthly information regarding cloud cover or fog.

The applicant provided no information in regards to the operational aspects of Merimbula airport having regard to wind conditions, and this omission is considered significant given that it is a single runway with predominate cross winds occurring there throughout the year.

Further, no review has been provided for the other five nominated airports.

¹ <https://www.aopa.org/news-and-media/all-news/1998/march/pilot/too-windy>

Use of other airfields

The applicant identified the use other airfields for flight circuit training would be undertaken by agreement (due to lack of capacity at Frogs Hollow) (see Appendix 6). On behalf of the JRPP, Council requested from the applicant letters of agreement from the airport operators, but these have not been forthcoming. On 18 October 2018, Council received advice from the applicant regarding the proposed number of flight circuits to be flown at each airfield, including Frogs Hollow, for each stage of the development (see Appendix 8). In this document it is advised that instead of each student being required to fly 80 circuits to achieve competency, as previously stated 15 November 2017, each student would only need to fly 55-65 dedicated circuits to achieve competency (taking into consideration that the student pilots are required to take-off and land by entering into the standard circuit “template”). Therefore, given the inconsistency in the documentation it is noted that any figures outlined below are not based upon a conservative estimate.

The application proposes to undertake circuit training at six other airfields (in addition to Frogs Hollow) at the following intensity (February to November) to accommodate the quantity of circuit training required by the proposed number of students:

- Moruya: 240 circuits, 6 days per month
- Merimbula: 96 circuits, 10 days per month

- Mallacoota: 96 circuits, 10 days per month
- Bombala: 96 circuits, 10 days per month
- Cooma Snowy Mountains: 96 circuits, 10 days per month
- Polo Flat: 96 circuits, 10 days per month

Council sought legal advice as to what its obligations are in relation to assessing the likely impacts of the development at the nominated six other airports. It was advised that:

The impacts of the proposed development external to the site arising from the additional flight movements at other airports is probably a likely impact of the proposed development, and one which Council is obliged to consider in its assessment of the development application. However, the extent of Council's assessment is a matter for Council. Obviously there are limitations on Council's ability to assess the impact of development outside the Local Government Area. It would be reasonable for Council to consider those impacts by assuming that the additional flight movements at those other airports not within the Local Government Area will either be authorised or required to be authorised by a further planning permit which considers environment impact.

The potential impacts on flight movements at the Merimbula airport is a matter about which Council will have specific knowledge. It would be prudent for Council to request the applicant to provide details of how many additional movements will result at Merimbula airport and determine whether or not those additional movements are within the approved capacity of that airport.

Therefore, based upon this advice, Council reviewed the Merimbula Airport site and sought feedback from the affected regional Councils (and airport owners): Bega Valley, Eurobodalla, East Gippsland and Snowy Monaro.

Merimbula Airport

The Merimbula Airport was originally constructed in the 1950s (opening in 1959) as a part of the Commonwealth Government Department of Aviation's national airport strategy. Council approval was not required. The Merimbula Airport Master Plan was created by Rehbein Airport Consulting in 2013 and was adopted by Bega Valley Shire Council at the Council meeting of 16 October 2013. The document clearly outlines its purpose and context as follows:

...the Airports Act 1996 summarises the aims of an Airport Master Plan as follows:

- *Establishing strategic direction for the efficient and economic development of the airport over the planning period;*
- *Providing for the development of additional uses of the airport site;*
- *Indicating to the public the intended uses of the airport site; and*
- *Reducing potential conflicts between uses of the airport site, and to ensure that uses of the airport site are compatible with the areas surrounding the airport.*

Although the Airport Act 1996 does not have statutory application to Merimbula Airport, this does not reduce the relevance of these four key aims. BVSC has identified several further specific objectives in commissioning this Master Plan, including the desire to:

- *Provide a basis for timely and coordinated development of aviation facilities and infrastructure to support the forecast increase in passenger and aircraft movements;*

- Provide a basis for appropriate management of the environment;
- Address key issues facing the airport through the development of concepts or options;
- Understand the current and future potential economic significance and importance of the airport to the community; and
- Inform the Merimbula Airport and Precinct Strategy.

The document details forecast movements into 2033. The high-growth scenario details annual movements of approximately 9,000 movements per year documented in 2012 culminating in approximately 16,500 movements per year in 2033. Of these, training movements have been estimated to grow from approximately 3,000 to a total of 3,800 movements per year. The flight school proposal details the intention to undertake flight circuit training at Merimbula in the vicinity of 9,600 circuits per year (96 circuits x 10 days per month x 10 months per year), or 19,200 movements per year (the Master Plan document details that a circuit corresponds to two aircraft movements). Therefore concern is raised with the extent of use proposed at Merimbula airport as it exceeds the high growth trajectory for circuit training at the site. The proposal to use Merimbula Airport for flight circuit training to supplement the Frogs Hollow airfield would more than double the total proposed annual flight movements at the Merimbula Airport, and increase flight circuit training at the airport by a factor of five.

The application advises that on 10 out of each 15 flying days per month (Feb-Dec), three sessions of 32 circuits are proposed to be flown at Merimbula Airport. The information provided to Council details that the 32 circuits would be flown over a 32 minute period, however it has not been demonstrated how this could be achieved and this scenario is not considered physically feasible. Advice to Council from the proponent is that it takes approximately 6 minutes to fly one circuit and up to six aircraft can be in the circuit at one time. However it is noted that while this intensity may be achievable at Frogs Hollow given that only SAFCA aircraft are likely to be in the circuit, and therefore all aircraft are likely to be the same type, speed and size, it is possible that at times the same intensity of training would not be achievable at other airfields due to other larger and faster aircraft using the airfield. Therefore Council Officers suggest that the 32 circuits would be more likely to require upwards of 49 minutes to complete (based upon a maximum of six aircraft in the circuit at the same time) and on occasion significantly longer. It is reiterated that 3 sessions are proposed for each of the 10 flying days each month. At 49 minutes duration each, this would result in 2.5 hours of flight circuit training being carried out at Merimbula Airport on each of these days. This would result in a significant increase in noise impacts on the surrounding residential receivers and tourism operators.

The proposal to use Merimbula Airport for flight circuit training to supplement the flight school at Frogs Hollow was raised with the airport owner (Council's General Manager on behalf of Bega Valley Shire Council), who directed the enquiry to Airport Agencies (the airport manager). The advice received provides:

Past experience has shown that the Merimbula Community does not tolerate continuous repetitive noise. We have in the past had operators of aerobatic joy flights and vintage aircraft flights that have been quite successful. Both of these operations produced vast numbers of noise complaints even though the aircraft involved did not exceed acceptable noise standards. However the repetitive nature of the operation did aggravate the community.

With the aerobatic operations we negotiated with the operator to operate in three different locations around the airport, to the north, although this produced complaints from the Turingal Head area to the east (out to sea) and south towards Eden. Whilst this didn't completely alleviate the calls it did subdue them. The vintage aircraft we were not able to alleviate the complaints without reducing the number of flights under taken in a given day.

Flight circuit training will generate the same scenarios with complaints coming from the Fishpen, Long and Short Point areas and Pambula Beach. For example the Black Dolphin Motel regularly have clients check out after the 6.30 am flight to Sydney has departed as they don't want to be woken up on holidays by aircraft noise. Another issue that we regularly field concerned calls about is engine failure training while departing runway 03 and this is a necessary part of flight training however where possible we currently encourage this part of the training to be completed at Frogs Hollow.

Over all I believe that continuous circuit training at Merimbula would create a full time position for Council dealing with an endless string of repetitive noise complaints.

Therefore the proposal to use Merimbula Airport is not supported.

The RAA Operations Manual details that the En-Route Supplement Australia (ERSA) "is a listing of aerodromes in Australia, outlining aerodrome elevation, CTAF and FIS frequencies, runway alignment, aerodrome operator contact information, fuel availability and more. There are many useful reference sections in ERSA including operating limitations for Prohibited, Restricted and Danger areas, with special area and fly neighbourly procedures, emergency reference procedures, conversion tables and code/decode pages". The ERSA is published by Airservices Australia. Council raised concern with the applicant that the proposed operations at other airports could be restricted through the ERSA.

The application details in the letter to Council dated 18 October 2018 that there are currently no restrictions outlined in the ERSA preventing flight circuit training at the proposed airports (see Appendix 8). The advice goes on to detail that airports are approved for airport activities, and that provided airspace restrictions are observed, an individual pilot, a flight training school or a commercial aviation company may utilise any airport in Australia on any given day. The letter notes that a pilot must observe all procedures that are specific to utilising that airport, but there are no restrictions preventing the use of airports. It details that changing the airspace architecture is a complex process. In light of this, Council wrote to Airservices Australia seeking advice on how the ERSA is applied so that it could better understand what limitations might be implemented by the registered and certified aerodromes through the ERSA. In response Council was advised "The aerodrome operator has its own rights to enter information regarding aerodrome operations and restrictions independently of Airservices. Therefore, you should be contacting the individual aerodrome operators". This advice is consistent with the advice provided by Airservices Australia on their website where they note in relation to circuit training: "Each airport makes its own determination about the hours of the day or days of the week during which training may take place". Council notes that noise abatement procedures restricting flight circuit training have been employed at Evans Head Memorial Aerodrome and that Lake Macquarie Airport does not permit circuit training at all.

Consequently Council considers that the proposed use of Merimbula Airport for regular circuit training is inconsistent with the adopted airport master plan, not welcomed by the airport manager, and therefore Council cannot rely upon the facility being available to accommodate the proposed number of circuits.

Moruya Airport

Council sought feedback from Eurobodalla Shire Council as owner of the Moruya Airport regarding the proposal to use the airport for flight circuit training. Advice was received as follows:

Further to our letter of 24 August 2018, thank you for sending the additional information from the applicant about plans for the Flight Training School at Frogs Hollow. Eurobodalla Shire Council maintains its objection to the development.

The information provided states that Councils do not control the airspace around airports. In Eurobodalla Shire Council's view that makes it all the more important that the impacts on amenity for residents living under flight paths is considered as part of the planning process.

Moruya Airport currently has about 19,000 aircraft movements per year. The figures provided by the applicant indicate 96 circuits on an average day, 10 days a month which equates to 11,500 extra movements a year. So residents would be subjected to an increase in air traffic of over 60%.

The figures listed are for an average day and the applicant admits that on certain days this could increase by 250%.

It is also highlighted that whilst Council does not regulate the airspace we do own the airport itself so landing fees and airport use (rather than airspace) is a matter for Council to consider.

Eurobodalla Shire Council is also concerned about the impact on other airport users and the applicant notes "Co-operation with other airport users is not an issue that would be unique to student pilots". Council agrees with this statement – the impact would be the same for any new airport user proposing such a significant increase in aircraft movements and given the scale of the impact, Council maintains its objection.

On a final point, the figures mentioned are indicative only. Once approved, there would be no further ability to control growth in aircraft movements so the potential future impacts are unlimited, and there appears to be no further detail available on the height that aircraft would be flying at or the noise levels of the aircraft. Further information on this would assist Council in assessing the impact on residents.

Therefore, Council notes that Eurobodalla Shire Council, as airport owners, are not in favour of the proposed use of Moruya Airport for the scale of circuit training proposed. It is noted that Moruya Airport, like Merimbula, is a registered aerodrome, and the same opportunities to restrict circuit training operations are available under the ERSA.

Mallacoota

Council sought feedback from East Gippsland Shire Council as owner of the Mallacoota Airport regarding the proposal to use the airport for flight circuit training. Advice was received as follows:

I note that your letter was seeking our input in terms of the capacity of the Mallacoota Aerodrome and estimated number of aircraft movements.

On review of the documentation provided to Council, we can confirm that there is the capacity for the Mallacoota Aerodrome to handle the proposed number of flight movements. It is noted that the Mallacoota Aerodrome currently does not receive a high volume of flights.

We do, however, reject the applicant's assertion that the East Gippsland Shire Council can recoup maintenance costs through landing fees, given that East Gippsland Shire Council does not charge landing fees at the Mallacoota Aerodrome.

Restrictions applying to Mallacoota Aerodrome would not impact on what the flying school proposes to do in relation to circuits and 'touch and go's' therefore it would be difficult to argue our facility is not suitable.

Council is aware that some residents of Mallacoota have concerns with the proposed use of the Mallacoota Aerodrome. Some residents have advised Council of concerns with respect to impacts on their amenity in terms of noise and pollution of the area resulting from the proposal.

Note that East Gippsland Shire Council values the amenity of settlements and residential areas very highly, and any activities that compromised this amenity would not be supported.

Therefore, Council notes that East Gippsland Shire Council, as airport owners, have reservations regarding the proposed use of Mallacoota Airport for the scale of circuit training proposed. Like Merimbula, the same opportunities to restrict circuit training operations are available to Mallacoota Airport under the ERSA.

Bombala, Polo Flat and Cooma Snowy Mountains Airport

The application details use of the Bombala, Polo Flat and Cooma Snowy Mountains Airports for flight circuit training. Council sought feedback from Snowy Monaro Council with regard to the proposed use of Bombala airport and requested contact details for the Polo Flat and Cooma Snowy Mountains Airports but did not receive a response. The likely impacts of undertaking circuit training at the proposed scale of 9,600 training circuits per year at these airports is not known and Council is not able to provide further comment.

In summary, the applicant cannot rely upon the facilities of Mallacoota, Moruya and Merimbula Airports being available to accommodate the proposed number of training circuits. Even if the applicant wished to undertake all the proposed circuit training at Frogs Hollow it would not be possible, and it is concluded that the proposal is an overdevelopment of the site.

Compatibility of existing land uses in the vicinity

Council undertook a review of available publications regarding bird strike. Airport Practice Note 6: Managing Bird Strike Risk Species Information Sheets released by the Australian Airports Association (AAA)¹ provides land use planning guidance in the vicinity of aerodromes in relation to bird strike risk. The publication details land uses that are incompatible with aerodromes within a 3km radius due to their propensity to attract birdlife at a scale that poses an unacceptable risk to aviation. The report lists putrescible waste facilities – landfill as an incompatible land use within 3kms of an aerodrome. The Wanatta Lane Central Waste Facility (Council landfill site) is located 2.6km from the subject site. The document does not detail that mitigation is an acceptable solution.

¹ https://www.atsb.gov.au/media/5353201/managing_bird_strike_risk_species_information_sheets.pdf

Provision of water

The site does not have access to reticulated water. The Fire Protection and Water Supply Plans detail that at stage 9 the daily estimated water requirement would be 49,200L per day.

Water is proposed to be captured and stored by rainwater harvesting, but supply is not reliable and based on decile 5 rainfall statistics a deficit would be anticipated for 10 out of 12 months of the year.

In order to partially remedy the deficit it is proposed to use recycled water for toilet flushing and fire-fighting supply, and bottled water (15L dispensers) for the drinking water component. A revised estimate of 28,080L daily water usage is provided.

The plans detail two proposed methods for making potable water:

- The first is the provision of 15L free standing water dispensers with returnable 15L bottles in each accommodation unit, office, classroom, hangar and maintenance buildings in addition to multiple dispensers in the main building.
- The second is to provide filtration and treatment of rainwater.

Based upon the revised estimate and the decile 5 rainfall statistics, a deficit is anticipated six months of the year. Relying upon cumulative storage, this is reduced to three months of the year.

Based upon the revised estimate and the decile 7 rainfall statistics (reasonable best case scenario), a deficit is anticipated two months of the year. Relying upon cumulative storage, no supplemental supply would be required.

Based upon the revised estimate and the lowest rainfall records for Bega weather station, a deficit is anticipated all 12 months of the year. The worst case scenario (October) details that the deficit would be in the vicinity of 870m³ or 870,000L. Over a month (31 days), this would result in reliance upon 28,064L of water cartage per day. Based upon a truck capacity of 20,000L, this would be the equivalent of 44 truck movements over the month, which would be required in addition to the provision of bottled water supply.

Water for firefighting has been proposed to be obtained from wastewater re-use, however no confirmation has been provided whether NSW RFS are satisfied with the use of treated wastewater for fire-fighting purposes. Council observes that the RFS general terms of approval require a hydrant system that conforms with AS 2419.1-2005 (now 2017). This standard specifies that only Class 4 recycled water can be used for firefighting purposes and the OSSM reports do not demonstrate that this can be achieved from the proposed systems of OSSM.

Summary

The various elements of the proposal at the subject site include:

- Accommodation and catering for up to 360 students at one time
- Storage and maintenance of up to 40 ultra-light aircraft
- Aviation training of up to 360 students at one time
- Flight training of up to 120 students over one day
- Bulk storage of unleaded fuel

Council observes that the site is challenged for the development at the proposed scale for the following reasons:

- The current scale of flight operations at the Frogs Hollow airfield is so insignificant as to render the site a greenfield site for the purposes of increasing the intensity of aviation activities.
- The character of the area as it exists reflects low density rural and semi-rural residential development inconsistent with a high intensity flight training school.
- The site is surrounded by 60 sensitive receivers that would be subject to noise and amenity impacts from the overflying of aircraft from this development. It has not been adequately demonstrated that the noise and amenity impacts from the proposal are satisfactory and reasonable.
- The site is an existing Aeroplane Landing Area (ALA) with non-conforming runways to CASA's CAAP 92-1(1) standards. The application has not detailed the full extent of works required to the runways to rectify these issues. It is not clear how the surrounding terrain is consistent with the requirements of Recreational Aviation Australia's Operations Manual pertaining to topography and vegetation.
- The site does not have access to reticulated water and sewerage infrastructure appropriate to high density residential accommodation, and is not benefitted by nearby commercial or retail land uses appropriate to the broader needs of students. Water is proposed to be captured and stored by rainwater harvesting, but recurrent deficit is anticipated, and reliance is heavily upon water cartage. Water for firefighting has been proposed to be obtained from wastewater

re-use, however no confirmation has been provided whether NSW RFS are satisfied with the use of treated wastewater for fire-fighting purposes. Council observes that the RFS general terms of approval require a hydrant system that conforms with AS 2419.1-2005 (now 2017). This standard specifies that only Class 4 recycled water can be used for fire-fighting purposes and the OSSM reports do not demonstrate that this can be achieved from the proposed systems of OSSM.

- The entirety of the site is identified Endangered Ecological Community – Lowland Grassy Woodland (EEC) and likely impacts upon the EEC have not been adequately considered in the biodiversity reports.
- The proposal exceeds the capacity of the site in relation to the quantity of flight circuit training required to be undertaken by the proposed number of students, and it has not been demonstrated that the outstanding requirements can be met by other airfields.
- It has not been adequately demonstrated that the development at the proposed scale can be accommodated over the proposed flight training schedule at the site or other six airfields, giving regard to the limitations of the aircraft and meteorological conditions.

Council concludes that the site is not suitable for the development as proposed.

Section 4.15(1)(d) any submissions made in accordance with this Act or the regulations

Council advertised and notified the application twice in accordance with the Environmental Planning and Assessment Regulation 2000.

A copy of all submissions are tabled for the JRPP with Appendix 5 providing a summary of the issues raised.

The initial advertising of the application received 462 submissions (461 against) and three petitions of 956 signatures, 1400 signatures and 217 signatures against the proposal. A further submission objecting to the proposal by the elected Bega Valley Shire Councillors was submitted directly to the JRPP.

With the lodgement of the Addendum Statement of Environmental Effects, the application was re-advertised with a further 259 submissions (257 against) being lodged with Council.

In total, inclusive of late submissions, 725 submissions (721 against) were received during the exhibition of the application, plus three petitions.

A public meeting held on 29 August 2018 provided the opportunity for 42 people to speak publicly about the application with all objecting to the proposal.

A review of submissions highlight a strong community objection to the development at Frogs Hollow and this was affirmed by the elected Councillors of Bega Valley Shire Council addressing at the public meeting. Objections were also raised in respect to the utilisation of Merimbula airport for flight circuit training associated with the development at Frogs Hollow.

Submissions were received from residents in adjoining Local Government Council areas of Eurobodalla and East Gippsland objecting to the utilisation of airports located at Mallacoota and Moruya for flight circuit training associated with the development at Frogs Hollow.

A review of the submissions highlight several key issues that are considered relevant in the assessment of this application. These issues are:

- Noise and amenity impacts at Frogs Hollow, Merimbula, Moruya and Mallacoota,

- Insufficient information to identify all impacts associated with the proposed flight school,
- Impacts on biodiversity at the site, especially identified Endangered Ecological Community - Lowland Grassy Woodland,
- That the use is incompatible with the rural, semi-rural character of Frogs Hollow and the surrounding areas having regard to land-use conflicts, existing character, suitability and overdevelopment of the site,
- Visual impacts, and
- The adverse socio-economic impacts on residents and businesses located in the Frogs Hollow locality, within the designated training area (25Nm radius), in the Bega Valley and beyond the extent of the Bega Valley Shire to Moruya and Mallacoota.

Section 4.15(1)(e) the public interest.

Over the assessment period, Council received a total of 725 written submissions and three petitions responding to the proposed development. All but three of the received submissions were against the proposal. The three petitions were also against the proposal. A public meeting held on 29 August 2018 provided an opportunity for 42 people to speak publicly against the proposal. Many of the matters raised in the submissions and public meeting align with Clause 4.15 (1) Matters for consideration – general of the Environmental Planning and Assessment Act 1979 and Council considers that the development is not in the public interest. In considering the public interest the following matters were considered.

The Precautionary Principle

The Objects of the Act (Clause 1.3) of the Environmental Planning & Assessment Act 1979 are to (b) "...facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment...". The principles of ecologically sustainable development are detailed in the Environmental Planning & Assessment Regulation 2000 (EP&A Regs) (Part 3, Section 7, Clause 4) as follows:

the precautionary principle, namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:

(i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and

(ii) an assessment of the risk-weighted consequences of various options,

Comments provided by Marshal Day Acoustics detail that the proposed development would result in adverse impacts upon the amenity of the area due to noise generation. The advice details that:

Circuit operations and regular overflights at relatively low noise levels (when compared to noise levels in the vicinity of major airports) represent the key noise impacts associated with this type of development. Whether this impact is acceptable is dependent on whether an appropriate balance has been reached between any potential benefits of the development to the local or broader community, and the noise impacts on neighbouring communities.

In the absence of well defined or regulated criteria to set noise limits for this type of development, determining whether this balance has been reached, requires a complete description of the extent and nature of the impacts on surrounding areas. In our opinion, the level of information that has been provided is not sufficient for this purpose.

Therefore in this instance, where there is a threat of serious environmental damage, the Precautionary Principle applies.

Further, the assessing officer has not been satisfied that the threat of environmental harm (impacts upon EEC) can be adequately mitigated as the likely impacts have not been adequately quantified.

The precautionary principle provides that “The benefit of the doubt is given to environmental protection when there is scientific uncertainty. To avoid environmental harm, it is better to err on the side of caution”¹. In this instance, refusal of the application based on a lack of information is considered to be the most appropriate option and affords the appropriate degree of precaution.

The risk-weighted consequences of the various options (approval or refusal of the application) have been considered and it is noted that:

- the choice of refusal may result in less skilled jobs in the Bega Valley,
- the Bega Valley may lose an opportunity to market itself to an international tourism market,
- the choice of taking action is strongly supported by the Bega Valley community,
- the opportunity remains for the proponent to propose development of a flight school at the same location of a lesser scale, and
- it is not likely that the choice of taking action will lead to the development not proceeding in a more suitable location.

¹ Telstra Corporation Limited vs Hornsby Shire Council [2006] NSW LEC 133

6.0 CONCLUSION

The application proposes a recreational flight school of significant scale and intensity at an existing Aeroplane Landing Area (ALA) currently experiencing very low usage in Frogs Hollow.

Council has undertaken a detailed assessment of the application in accordance with Section 4.15 Matters for consideration-general of the Environmental Planning and Assessment Act 1979 (as amended). The application was referred to a range of external agencies for comment. General terms of approval were provided from NSW Rural Fire Service. Council sought independent advice from Marshall Day Acoustics with regard to the likely noise impacts of the development.

Council's assessment has identified inconsistencies with the proposal and the South East and Tableland Regional Plan 2036, Bega Valley Local Environmental Plan 2013, and the Bega Valley Development Control Plan 2013. At the time of completion of the assessment, concurrence from NSW Roads and Maritime Services had not been received.

The application fails to adequately quantify the likely impacts of the development, including noise and amenity impacts upon all sensitive receivers, impacts upon EEC Lowland Grassy Woodland, and social and economic impacts to the locality and broader region.

The application does not demonstrate that the development site is suitable for the intended use, with regard to the intensity of the proposed flight operations, site constraints, and lack of certainty that the training requirements can be accommodated at the other nominated airports. Council must conclude that the proposal is an overdevelopment of the site.

During the assessment 725 submissions were received, which included 720 letters against, 4 in favour of the proposal and one neutral response, in addition to 3 petitions against. The submissions raised concern with a broad range of issues, including several matters of relevance to the assessment of this application, being:

- Noise and amenity impacts at Frogs Hollow, Merimbula, Moruya and Mallacoota,
- Insufficient information to identify all impacts associated with the proposed flight school,
- Impacts on biodiversity at the site, especially identified Endangered Ecological Community - Lowland Grassy Woodland,
- Incompatibility of the use with the rural, semi-rural character of Frogs Hollow and the surrounding areas having regard to land-use conflicts, existing character, suitability and overdevelopment of the site,
- Visual impacts, and
- The adverse socio-economic impacts on residents and businesses located in the Frogs Hollow locality, within the designated training area (25Nm radius), in the Bega Valley and beyond the extent of the Bega Valley Shire to Moruya and Mallacoota.

Therefore, in this instance the precautionary principle applies, and the application is recommended for refusal.

7.0 RECOMMENDATION

That development application 2017.445 be refused for the following reasons:

1. For the purpose of Section 4.15(1)(a)(i) of the Environmental Planning and Assessment Act 1979 (as amended), comments on revised information submitted by the applicant has not been received from the NSW RMS to determine the accessibility of the site concerned and any potential traffic safety, road congestion or parking implications of the development, in accordance with Schedule 3 of the SEPP (Infrastructure) 2007.
2. For the purpose of Section 4.15(1)(a)(i) of the Environmental Planning and Assessment Act 1979 (as amended), the development would be inconsistent with the following aims of Clause 1.2(2)(a)(b)(c)(d)(e)(f) and (h) of the Bega Valley Local Environmental Plan 2013 in terms of:
 - The Socio-economic Impact Assessment report does not demonstrate a net benefit to the economic, natural and social resources of the Bega Valley, because the report relies upon the noise and amenity impacts being below acceptable thresholds, and this has not been demonstrated in the noise assessment report,
 - The biodiversity assessment reports provided to Council do not adequately consider the full extent of vegetation clearing proposed, or the extent of impacts upon native remnant vegetation from effluent disposal on the site and required CASA's civil aviation advisory publication (CAAP) 92-1 (1) in terms of available approach and take-off areas. Inadequate consideration has been given to the impacts upon biodiversity with regard to the proposed use of other airports,
 - Inconsistency with the intent for compact and efficient development,
 - The intensity of development is inconsistent with the existing character of Frogs Hollow and would detract from the natural landscape and built form environment of the Bega Valley,
 - The development has not adequately addressed potential impacts on Aboriginal cultural heritage at the site.
3. For the purpose of Section 4.15(1)(a)(i) of the Environmental Planning and Assessment Act 1979 (as amended), the development is inconsistent with the SP2 Infrastructure zone objectives as it will:
 - Significantly increase air traffic within the Frogs Hollow Airport without providing any infrastructure to improve operations or safety at the site.
 - Significantly limit the provision of future infrastructure and development at the site.
4. For the purpose of Section 4.15(1)(a)(i) of the Environmental Planning and Assessment Act 1979 (as amended), the proposed development is inconsistent with the objectives of Clause 4.3(a) of the Bega Valley Local Environmental Plan 2013 with regard to retaining the existing character and landscape of the locality.
5. For the purpose of Section 4.15(1)(a)(i) of the Environmental Planning and Assessment Act 1979 (as amended), inadequate information has been provided to consider the potential impact on Aboriginal Archaeology over the site given the moderate to high possibility of it being present within the site and failure to identify mitigation measures required by Clauses 5.10 and 6.2 of Bega Valley Local Environmental Plan 2013.
6. For the purpose of Section 4.15(1)(a)(iii) of the Environmental Planning and Assessment Act 1979 (as amended), the proposal does not satisfy the criteria of Sections 5.4 and 5.7 of the

Bega Valley Development Control Plan 2013 pertaining to the socio-economic impacts of the development and onsite sewerage management.

7. For the purpose of Section 4.15(1)(b) the development will have an adverse impact on the amenity of the area due to noise generation. Insufficient information has been provided to describe the extent and nature of the likely impacts of the development on surrounding areas. Therefore there is inadequate information to determine that the noise impacts are acceptable.
8. For the purpose of Section 4.15(1)(b) the development is not consistent with the following actions of the South East and Tablelands Regional Plan 2036: 9.2, 23.3, 23.5 and 28.3, in relation to:
 - The types of nature or eco-based tourism activities endorsed by the plan,
 - Protection of the region's heritage, and
 - Managing land use conflict.
9. For the purpose of Section 4.15(1)(b) of the Environmental Planning and Assessment Act 1979 (as amended), the application has not adequately considered the full extent of likely impacts upon the natural environment, including:
 - The clearing of identified Endangered Ecological Community Lowland Grassy Woodland in order to comply with the physical dimensions of CASA's civil aviation advisory publication CAAP 92-1 (1).
 - The disposal of effluent upon identified Endangered Ecological Community Lowland Grassy Woodland at the site.
 - The required works to the runways to comply with the physical requirements of CAAP 92-1 (1).
10. For the purpose of Section 4.15(1)(b) of the Environmental Planning and Assessment Act 1979 (as amended), the application has not adequately considered the social and economic impacts in the locality, as the Socio-economic Impact Assessment is based on a Cost Benefit Analysis that is for a different sector (transport), and not appropriate to the sector (education) that the proposal relates to.
11. For the purpose of Section 4.15(1)(c) of the Environmental Planning and Assessment Act 1979 (as amended), the application fails to demonstrate that the development site is suitable for the intended use, in relation to the following matters:
 - Impact on the amenity and character of the Frogs Hollow Area and also to the amenity around other airports that would be utilised for the flight school.
 - The capacity of the site to undertake the required quantity of flight circuit training for the number of students proposed, and lack of certainty that the excess can be accommodated at the other nominated airports.
 - Whether the site is capable of complying with CASA's civil aviation advisory publication (CAAP) 92-1 (1) in terms of available approach and take-off areas.
 - Whether the site is compliant with Recreational Aviation Australia's Operations Manual with regard to topography and surrounding vegetation.
 - Proximity to the central waste facility (Council landfill site) at Wanatta Lane, Frogs Hollow which, within a distance of 3kms, is an incompatible land use to an aerodrome according to Airport Practice Note 6: Managing Bird Strike Risk Species Information Sheets released by the Australian Airports Association.

- Consideration of the meteorological constraints of the site, including sunrise/sunset times in winter, wind, rain and fog, or how the proposed scale of flight training operations, with regard to the limitations of the aircraft, can be adequately performed at the site or at other airports that would support the proposed flight school.
12. In accordance with Section 4.15(1)(d) of the Environmental Planning and Assessment Act 1979 (as amended), Council has reviewed the submissions received, and note that several matters were raised of relevance to the assessment of this application. The development as proposed is not in the public interest.
13. For the purpose of Section 4.15(1)(e) of the Environmental Planning and Assessment Act 1979 (as amended), there is a threat of serious environmental damage and therefore the precautionary principle applies. In this instance, refusal of the application based on a lack of information is considered to be the most appropriate option and affords the appropriate degree of precaution.

8.0 APPENDICES

Appendix 1 – Section 4.15 (previously 79C) Assessment Report

Appendix 2 – Referrals from External Agencies

Civil Aviation Safety Authority (CASA)

Airservices Australia

Recreational Aviation Australia (RAA)

NSW Roads and Maritime Services (RMS)

NSW Rural Fire Service (RFS)

NSW Office of Environment and Heritage (OEH)

NSW Environment Protection Authority (EPA)

NSW Health

NSW Department of Primary Industries (DPI)

NBN Co

Australian Government Department of Infrastructure, Regional Development and Cities

Bega Local Aboriginal Land Council

Appendix 3 – Advice from Marshall Day Acoustics

Appendix 4 – Referrals from Merimbula, Moruya and Mallacoota Airport Owners/Operators

Bega Valley Shire Council (as Merimbula Airport owner)

Eurobodalla Shire Council (as Moruya Airport owner)

East Gippsland Shire Council (as Mallacoota Airport owner)

Appendix 5 – Summary of Submissions

Appendix 6 – Further information letter 15 November 2017

Appendix 7 – NGH Cover Letter and Statement of Environmental Effects Addendum

Appendix 7A – SOEE Addendum Attachment: Development Plan Set

Appendix 7B – SOEE Addendum Attachment: Map of Receptors within 2kms of Airfield

Appendix 7C – SOEE Addendum Attachment: Noise Impact Assessment

Appendix 7D – SOEE Addendum Attachment: Biodiversity Assessment Report

Appendix 7E – SOEE Addendum Attachment: Biodiversity Assessment Addendum Report

Appendix 7F – SOEE Addendum Attachment: Onsite Wastewater Management Plan

Appendix 7G – SOEE Addendum Attachment: Onsite Wastewater Management Addendum Report

Appendix 7H – SOEE Addendum Attachment: Fire Protection and Water Supply Plan

Appendix 7I – SOEE Addendum Attachment: Fire Protection and Water Supply Addendum Report

Appendix 7J – SOEE Addendum Attachment: Aboriginal Cultural Heritage Due Diligence Report

Appendix 7K – SOEE Addendum Attachment: Traffic Impact Assessment Report

Appendix 7L – SOEE Addendum Attachment: Traffic Impact Assessment Addendum Report

Appendix 7M – SOEE Addendum Attachment: Socio-Economic Impact Assessment

Appendix 7N – SOEE Addendum Attachment: Sustainable Design Management Plan

Appendix 7O – SOEE Addendum Attachment: Aircraft Visual Impact Assessment

Appendix 7P – SOEE Addendum Attachment: Operations Summary

Appendix 8 – Letter to Council 18 October 2018 (addressing the proposed use of other airports, potential for prohibitions on flight training, circuit training component, flight schedule and travel time to nominated airports, progressive staging of flight movements, flight movements at nominated airports, prevailing wind conditions)

Appendix 9 – Onsite Wastewater Management Plan Amendment 2 (14 October 2018)

Appendix 10 – Air Quality Assessment

Appendix 11 – Applicant’s Response to Submissions

Appendix 12 – Flight Paths

Appendix 13 – Operational Wind Conditions at Frogs Hollow Airfield

Appendix 14 – Visual Impact Assessment – Part 1

Appendix 14 – Visual Impact Assessment – Part 2

Appendix 15 – Preliminary Site Investigation: Potential contamination of land

Appendix 16 – Intersection Design Plans Revision B

Appendix 17 – Intersection Design Report Issue C

Appendix 18 – Visual Distraction over Princes Highway Assessment

9.0 REFERENCES

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