



TOWN OF VICTORIA PARK Received: 07/04/2022

DATE:	6 April 2022
FROM:	Miguel de la Mata Acoustics Consultants Australia – Director
TO:	Steven Russell Blasta Brewing Company
SUBJECT:	Lots 1-5 Goodwood Pde, Burswood – Noise Impact Assessment Addendum
REFERENCE:	10.00388R-02

Dear Steven,

Acoustics Consultants Australia (ACA) was engaged by Blasta Brewing Co. to undertake a Noise Impact Assessment of the proposed restaurant/café and brewery for Lots 1-5 Goodwood Pde, Burswood. ACA issued a report (ACA ref. 10.00388R-01, 'the Report') dated 3 February 2022, which was peer reviewed and received commentary by the Town of Victoria Park (ToVP).

The Report received comments on 11 technical aspects listed in a letter by an independent reviewer engaged by the ToVP, who recommended a review of the noise assessment before the project application may be given further consideration. This document provides clarification and expands on technical details focused in addressing the observed technical points.

The comments provided by the reviewer have been listed in the attached table in the following pages together with our detailed response.

Sincerely,

Miguel de la Mata (M.A.A.S. MIEAust)

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> -11.2 -10.6

-10.2 -9.7

-9.3

48.0 dBA

ble 1	Acoustic Review Register			Received: 07/04/2022
ltem	Reviewer Comment	ACA Report Section Reference	ACA Response	
I	'Excessive Noise The report currently demonstrates a 4 dB noise exceedance. It states that the residual exceedance reduces to 1 dB due to reductions in patron numbers. Any exceedances of the Noise Regulations, whether 4 dB or 1 dB are not supported. Furthermore, the report does not recommend any control methods that the venue will need to use to reduce noise emissions.'	Table 7, Section 4.4	ACA carried out one modelling scenario considering the extreme worst-case possible scenario to demonstrate that under the unlikely 1. The venue will be at full crowd capacity (950 pax) 2. All the mechanical plant would operate continuously, under worst case conditions and acoustically untreated. The venue is expected to be compliant Mondays to Sundays between 9am and 10pm. Further, under this extreme scenario, a 4 dB exceedance was predicted for operations after 10pm. To this, it is expected that crowd numbers after dinner as it is typical of similar venues, which would reduce noise levels by approximately 3 dB, therefore reducing the that 1 dB exceedance is still an exceedance that must be reduced by the proponent. To estimate what is controlling the exceedance at the most affected noise sensitive receiver (apartment on the 5th floor facing north of noise contributions and a visual of the various noise sources considered in the modelling are shown below:	numbers will be reduced to half those page exceedance to 1 dB. It is acknowledge
			Cutdoor Dining (Crowd) Window 1 Door Outdoor Dining Receiver: 118 Goodwood Pde, 5th floor (North) AC Beer Hall AC Bistro Alley/alfresco Cool Room 1 Cool Room 2 DOOR Alley 1 DOOR Alley 2 DOOR entry Beer Hall	Noise Contribution from source (dBA) 25.2 27.7 23.8 26.6 23.6 31.8 27.8 18.8
			Door Alley 1 Door Entry Restaurant DOOR Entry Restaurant DOOR Outdoor dining Kitchen Fan Outdoor Dining Roof Beer Hall Roof Bistro Toile Fan 1 Toile Fan 2	18.4 37 20.2 38.4 41 45.4 10.1 9.3
			Window 9 window 1	-14.6 -14.4

Further details of noise source definitions (i.e. crowd sound levels, windows opened or closed, roof type, etc) will be clarified/discussed in the following points of this table.

Window 5

Window 6 Window 7

Window 8 Window 9

Resulting Predicted Noise Level

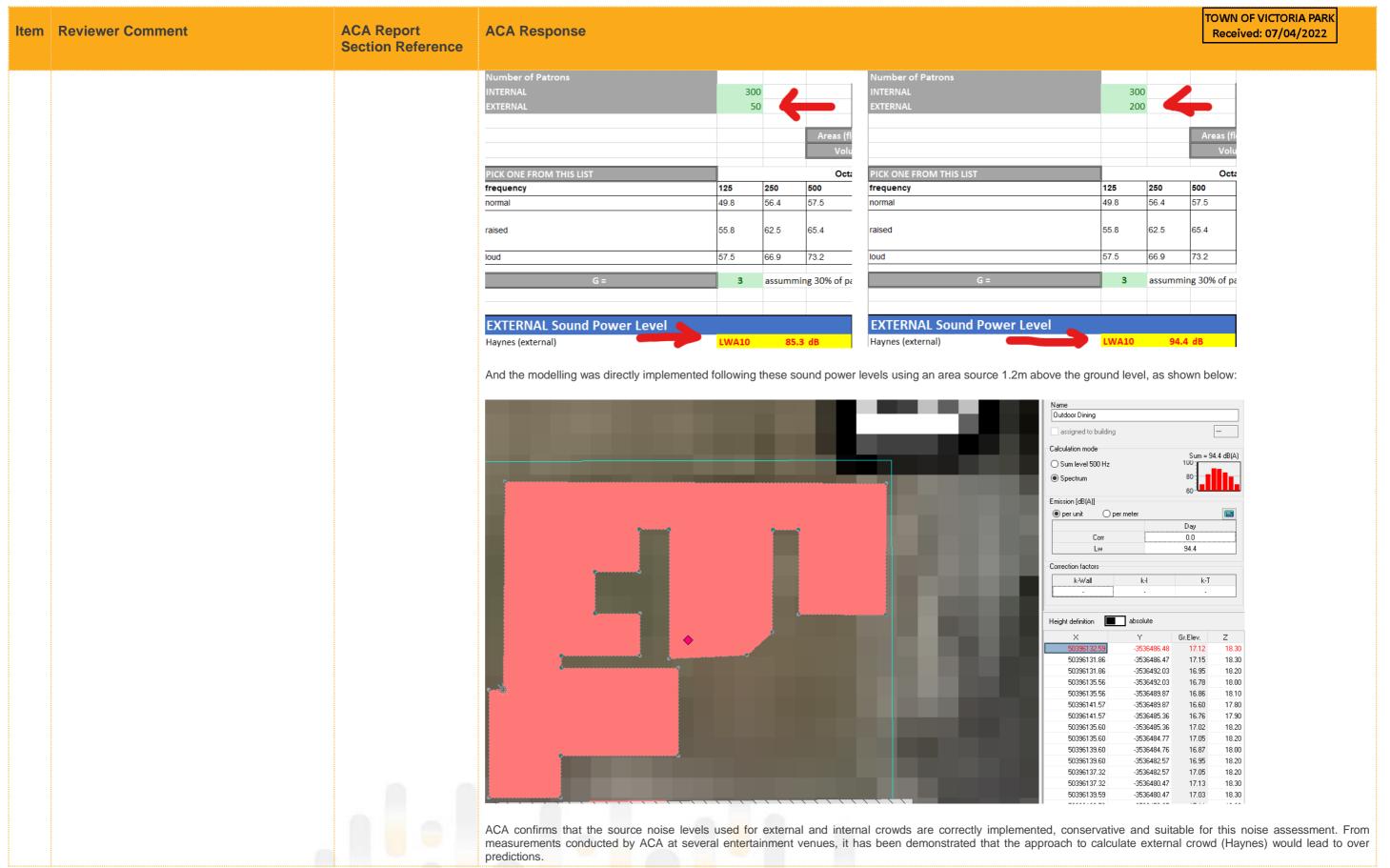


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Item	Reviewer Comment	ACA Report Section Reference	ACA Response	Rec	eived: 07/04/2022
		Section Reference			
			From the noise source contribution table above, it is observed that the noise sources controlling the emissio 1. Breakout noise through both <u>roofs</u> of the <u>Bistro and the Beer Hall</u> . With breakout noise through the to the difference in size. These noise levels add up to 47 dBA 2. <u>Outdoor Dining</u> contributing with 38 dBA. 3. <u>Door Outdoor Dining</u> this is when the door is <u>open</u> at all times. This contributes with 37 dBA. These 4 noise sources listed above add up the 48 dBA predicted noise level. Data from the exiting Blasta Brewing Co shows that the number of patrons that stay in the venue after 10pm of the site. This type of venue does not focus on late night patronage model, such the likes of a nightclub of case patron numbers, confirmed with the proponent are: - Beer Hall = 100 pax - Bistro = 100 pax - Outdoor Dining area = 200 pax With these numbers the new noise breakout profile through the roofs would lead to the following updated (night-time specific) predictions >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Bistro predicted 4 dB louder than the Be	h of the maximum capacity ment precincts'. The worst- Revised Noise Contribution from
			Dadwa 5 dB form hardward raise through the footdard Divise Dark This would be achieved by lossein	AC Bistro	27.7
			Reduce 5 dB from breakout noise through the 'Outdoor Dining Door'. This would be achieved by keeping such door <u>closed from 10pm</u> .	Alley/alfresco	23.8
				Cool Room 1	26.6
			In compliance of the night-time assigned noise levels of 44 dBA upon implementation.	Cool Room 2 DOOR Alley 1	23.6
				DOOR Alley 2	27.8
				DOOR entry Beer Hall	18.8
				DOOR Entry Restaurant	18.4
				DOOR Outdoor dining	32
				Kitchen Fan	20.2
				Outdoor Dining	38.4
				Roof Beer Hall	36
				Roof Bistro	40.4
				Toile Fan 1	10.1
				Toile Fan 2	9.3
				window 1	-14.6
				window 2	-14.4
				Window 5	-11.2
				Window 6	-10.6
				Window 7	-10.2
				Window 8	-9.7
				Window 9	-9.3
				Resulting Predicted Noise Level (dBA)	44
2	'Noise Generated by Crowds The report has used Rindel (2012) to estimate crowd noise generation. This research is applicable for rooms, halls and other internal spaces. This work is presented as Leq noise. ACA have interpreted this	Section 4.1, page 15	The reference from our report to Rindel are for calculation of INTERNAL crowds' reverberant sound pressur to calculate the noise breakout from the site. Internal Crowds:	e levels. These reverberant sound press	ure levels were then used
	emission as LA10 noise emission, resulting in the		Here below is one example as to how the sound power levels used in the breakout noise modelling were cal	iculated:	
	ACA forecasts being approx. 3 dB too low.		- BISTRO: crowd = 300 pax internal		
	Furthermore, the Rindel work does not address		- Group number assumed = 3		
	noise from beer-gardens or other outdoor spaces.		- Vocal effort assumed for assessment: Raised Voice		



TOWN OF VICTORIA PARK **Item Reviewer Comment ACA Report ACA Response** Received: 07/04/2022 **Section Reference** We have referenced Hayne et al (2011) to establish Reverberation Time assumed for assessment (1.5 s), conservative as we recommend 1 s. Thus, calculated absorption A = 280 Sabines. the noise generated by outside crowds and find that Reverberant Sound Pressure Level calculated using the formula: LA10 = 93 - 20 Log[A/(crowd/G)] + 3 - This results in a reverberant sound pressure (LA10) of 87 the ACA LA10 crowd noise is between 7 – 8 dB too dBA. While these are overall levels, ACA used 1/1 octave band noise levels throughout all calculations. low in outdoor areas. This translates to increased Breakout noise calculations were undertaken using a composite transmission loss of the roof as Rw 21 dB. Inclusive of: noise reaching neighbouring areas, by between 3 o Steel roof sheeting (770 sqm) - Rw 21 dB and 8 dB.' o Glass inserts (8.5 Vlam Hush recommended) (143 sqm) – Rw 38 dB o Flanking paths through services (0.1 sqm) – Rw 2 dB - This results in an Area Source of 916 square meters with a total Sound Power Level Lw = 92.4 dBA. This was used directly in the modelling calculation, as shown below: Roof Bistro assigned to building 46 Calculation mode Sum = 92.4 dB(A) O Sum level 500 Hz Spectrum O per meter per unit 92.4 Height definition absolute -3536508.56 17.15 50396113.87 21.71 50396114.04 -3536535.57 16.72 21.71 -3536535.29 50396132.28 21.71 15.72 50396147.94 -3536519.34 21.71 15.26 The estimation of external crowd noise was done using the Haynes formulae. In agreement with the reviewer. Shown below is an abstract of our calculation sheets for the conservative maximum crowd numbers of 200 and 50 patrons, where the LA10 sound power levels are calculated using $Lw_{A10} = 15 Log (crowd/G) + 67$







em	Reviewer Comment	ACA Report Section Reference	ACA Response												ORIA PARK 04/2022
	'Sunday operations The current forecast noise levels do not appear to present Sunday daytime noise emissions involving the Southern Alfresco area and café. These areas are nearest the most-affected residential areas and, as referenced in Sections 2.1 & 2.2 above, it is likely to lead to further noise exceedances.'	Appendix B and Table 5	Worst-case Sunday operations have been as To consider a Sunday morning scenario, the assessment of the proposed café and the sou crowd only at the nearest noise sensitive rece This is compliant with the Sunday assigned not acoustics consultants Café assessment Item / Description Typical Speech Lw - Klark Teknik	crowd numbers inside the Bistruthern Alfresco is presented belower is L _{A10} 39 dB. Then, adding u	o, Beer Hall w. Based on p the rest of Rating/B Rating	and alfre a worst-c f the possi	sco are case ful ble nois	eas would I capacity	have to of the as during Job No. Date Cr 07 Ap Date Re Octar 3 125	o be realfresce a Sun eated or 2022 eviewed	ealistic o area, nday mo Job Title By MdIM By	ally ass as sho prning, l Date Revise 07 Apr 2 Review Type	wn bel noise v	ow, the	contribution of up to L _{A10} 4
				Haynes for 42 pax "Casual"	Wate		84.2 (A)							1.5 70.	
			Plane Source Propagation Loss - Point Source Region	Trayries for 42 pax Casual	70.0 m	•	20.0 m	•							
			‡ Plane Source Propagation Loss - Point Source Region		70.0 m	3.0 m	20.0 m		-44.9	-44.9	-44.9	-44.9 -	44.9 -4	4.9 -44	9
			゠												
			Linear Sum	Result at receivers 70m from the café		-	39.3 (A)		34.6	37.6	39.6	31.6	28.6 2	6.6 25.	3
		Receiver: 118 Goodwoo AC Beer Hall AC Bistro Alley/alfresco Cool Room 1 Cool Room 2 DOOR Alley 1		L18 Goodw AC Beer Hal AC Bistro	II	e, 5th f	floor (N		Contrib	d Noise oution fr (dBA)	25.2 27.7				
							26.6								
								23.6							
			RAMP BOH 60 fer?	APPROX. FFL	15.25			OOOR Alley	ey 1						
		DOOR entry Be STAFF D													
			PPROX FFL 16.71	MALE MALE			_	Kitchen Fan							20.2
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STORE			_	Outdoor Di							
					7)	_	Roof Beer H							26
							_	Roof Bistro Foile Fan 1							30 10.1
		Operations linked with Cafe - Approximately 42 pax Bilke RACKS (6 No. OFF) BITUMEN CROSSOVER Window Windo								9.3					
										-14.6					
			_	window 2							-14.4				
			1	Window 5							-11.2				
			Window 6							-10.6					
			_	Window 7							-10.2				
										-9.7					
							_	Nindow 9 CAFÉ							-9.3 39.3
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4	'Glass Waste Glass waste needs to be regularly placed in large industrial bins on site. This is an activity that can be done after or close to closing time. There will be times where this could occur after 10pm, during the most-sensitive period at the night. An assessment is required to determine when this activity is to happen, where, how often and the forecast noise emission reaching the neighbours.'		Item 11 of Table 8 of the Report recommends limiting these operations to Monday to Saturday 7am-7pm. The proponent commits to this measure to eliminate the risk of glass bin noise after regular daytime hours.
5	'Roof Noise The report has not presented an assessment of the current building façade constructions. There is a reference5 to using Rw 35 glazing elements, to treat roof gaps and openings and the use of shielding of fan noise. There has been no discussion on the ability of the existing roof or walls, to limit noise reaching residences. From aerial photography there appear to be approx. seventeen rooftop fans or roof penetrations. The report needs to discuss these seventeen sources, and whether they generate mechanical services noise or allow patron noise from inside.'	Section 5, Table 8	While the report could not describe every detail of the assessment undertaken. Please refer to Item #2 of this Table for details on considerations for the roof assessment. The roof will be treated and sealed by the proponent, including the existing ventilation ductwork. While some consideration has been given to gaps around the roof, these penetrations will be treated to maximise air tightness. Glass will be replaced with laminated acoustically rated glass. Items 1 and 2 of this table describes the details of itemised noise sources considered in the assessment. Walls are made of brick, which has a sound transmission loss (Rw 45 dB +) that reduce noise breakout to negligible levels.
6	'Windows / Doors The report has referenced that all operable doors and windows are open, except for fixed windows or service/back of house doors. The implementation of sound rated glazing suggests that these windows are to be fixed and kept closed. It is not clear from the report however which doors and windows are to be kept closed, and during which periods.'	Section 2.4, page 9 Section 4.4, page 19	Receiver



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7	'Commercial Areas No assessment has been conducted of environmental noise reaching existing commercial premises. The noise contour plot7 suggests that the LA10 60 dB noise contour, being the commercial premises Assigned Level, will reach the nearby commercial premises. We have also flagged in Sections 2.1 & 2.2 above why we believe that the noise forecasts could be underestimates by between 3 – 8 dB. This needs to be addressed by the applicant.'	Appendix B	Commercial premises assessment has been conducted for adjacent premises as shown in the modelling images below. The results of the assessment are presented in Table 7 or the Report.
8	'Land Zoning The area surrounding Blasta Brewing Co is all zoned office/residential. The construction and operation of the brewery will result in excessive residential noise at the nearest unoccupied neighbours, being 14, 16, 18, & 21 Stiles Avenue. This means that residential development is incompatible with the proposed brewery, and that residential development will not be possible on these lots without restrictions to the brewery operations. This is similar to the unresolved problems with residences and bars/night clubs in the Northbridge area.'		In consultation with the Planning Department of the ToVP, these lots were mentioned to have potential for mixed development. This may or may not include residential development in the future. From Council information, there are no current plans or development proposals for residential development on any of the mentioned lots and considering the lease dates of the proposed venue, it was considered unreasonable to nominate a lot as residential when the applicable current use is commercial to light-industrial. Where there is reasonably foreseeable future for residential development in a neighbouring lot, a noise assessment for highly sensitive receivers would be conducted and the conditions for the site shall be applied. However, this is unlikely to occur within a time frame that includes tenancy terms of the proponent. Furthermore, noise predictions for (commercial) lots on Stiles Avenue range between LA10 44-47 dB. This would be in compliance of the daytime and evening or Sunday assigned noise levels for highly sensitive receivers (residential). It is our opinion that it is incommensurate to compare this area in Burswood with the situation of an area such as Northbridge, which has a major issue associated with nightclubs and venues generating low frequency noise at night-time hours. Not only this proposal has a very different noise emissions profile in terms of noise sources definition, but also the periods of the day when operations are likely to be the highest do not put this proposal in the same range of comparison to issues occurring in the Northbridge area. It is acknowledged that the Regulations must be compliance is feasible after implementation of the acoustic recommendations. Acoustic mitigation and building treatment (where required) becomes essential and key to ensure venues like the proposal can co-exist within a reasonable distance from residential lots. This is not a nightclub proposal the noise emissions from these developments have very different noise emission profiles.
9	'Status of 12 Stiles Avenue #12 Stiles Avenue has been classified by the report as "commercial". [] is not in possession of any additional information but question its status, given that it appears to be residential in aerial and ground photography (Refer Google). It the event that the site is residential, the brewery noise at this location suggests exceedances of the	Page 6 and page 18	The site is being used as commercial and, from conversations with Planning of the ToVP, there are no current plans for development of such lot. In the case when in the future this lot would be proposed for highly sensitive development, please follow our response in Item 8 of this table.
	Noise Regulations. We recommend that the Town investigate this further.'		



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10	'Internal Noise criteria The report suggests noise intrusion criteria into residential apartments based on Australian Standard AS2107 and the World Health Organisation Guidelines for Community Noise 1999. These are rejected outright. [] recommends that ACA familiarise themselves with the Environmental Protection (Noise) Regulations 1997. Regulation 19 deals with the assessment of noise inside dwellings. This is the applicable approach for assessing internal noise levels in Western Australia.'	Section 3.2	Noted. AS2107 and the WHO Guidelines are well-known guidelines used in Australia for management of internal health and amenity impacts reason of the reviewer to dismiss these guidelines under the framework of an environmental assessment, though we do not share the same v EPNR. This, however, may be subject for separate discussion. The noise assessment has been conducted exclusively based on the Environmental Protection (Noise) Regulations 1997.	
11	'Where the environmental standard cannot be met The report suggests that there is an alternative approach where "There will be genuine cases where the assigned levels cannot reasonably or practicably be met" by "a proposed industry which cannot be located far enough away from residences". If the applicant is suggesting that their proposal cannot reasonably or practicably meet the Noise Regulations, we recommend immediate rejection of the application. This is because there is nothing in the Environmental Protection Act (1986), nor the Environmental Protection (Noise) Regulations 1997, which allows for consideration of "the cultural and community value of the proposed premises." as suggest by the ACA Report.'		As discussed in the points raised in this table. Full compliance with the Regulations by the proposal has been demonstrated. ACA does not find it necessary for exceptional application under the Regulations. Our reports provide background comments on the Regulato compliance of a venue is feasible, this will not be necessary at all. There are no reasonable grounds to reject a proposal when detailed noise assessment predicts compliance of the Regulations.	ry framework; however, when fu

