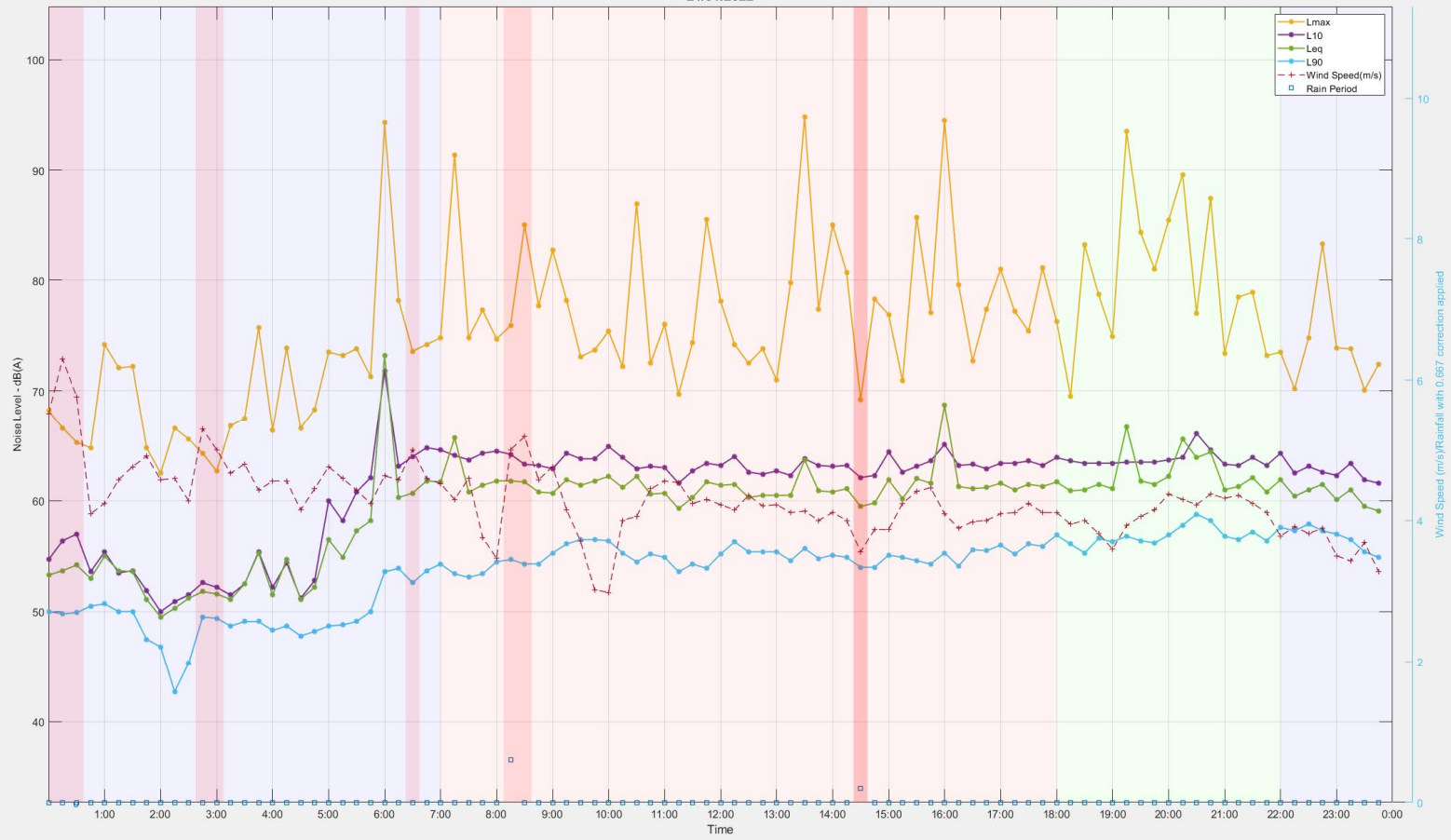
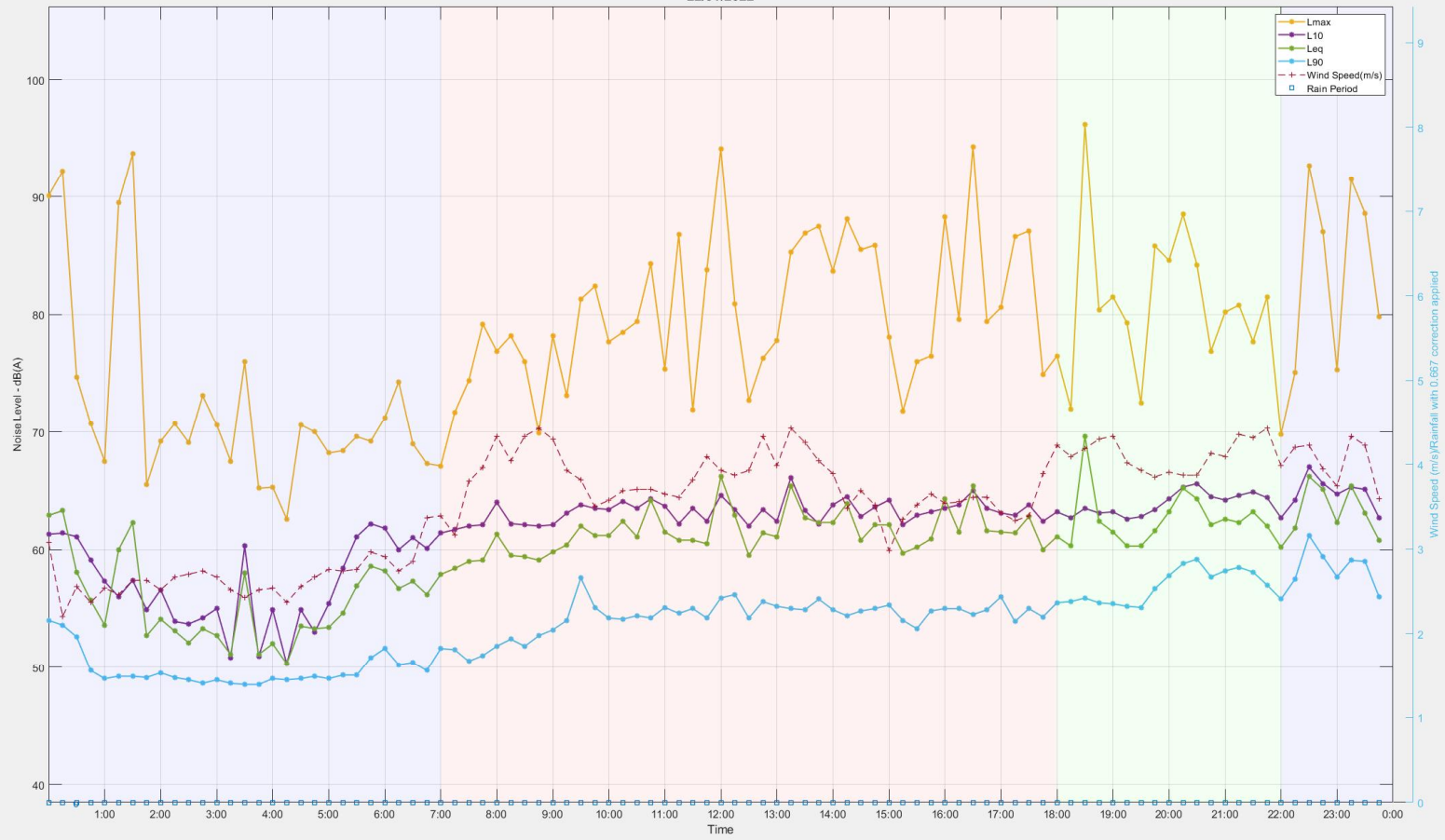


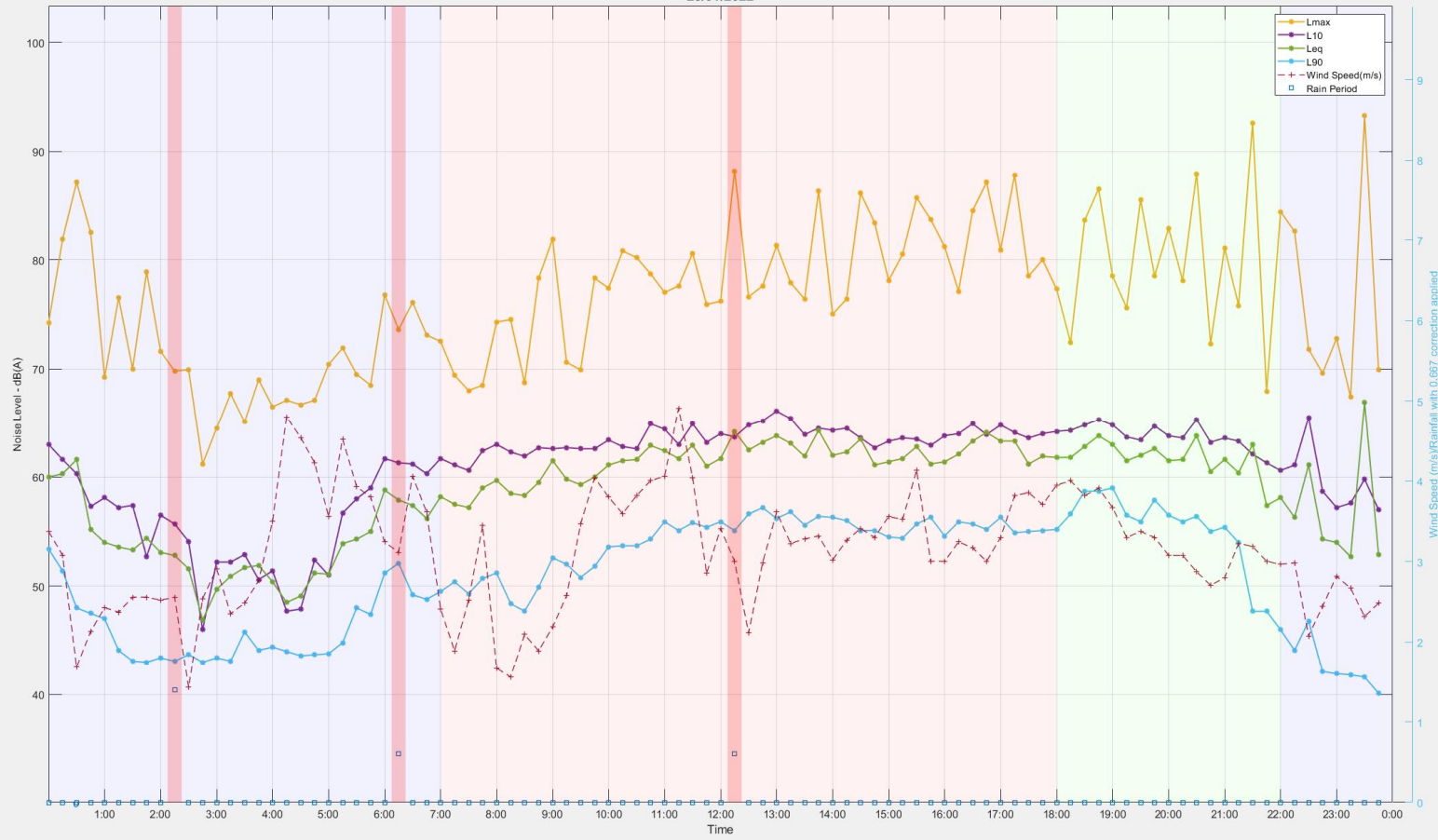
Location 2 - 303-304 & 282-298 Lawrence Hargrave Drive, Thirroul
21/01/2022



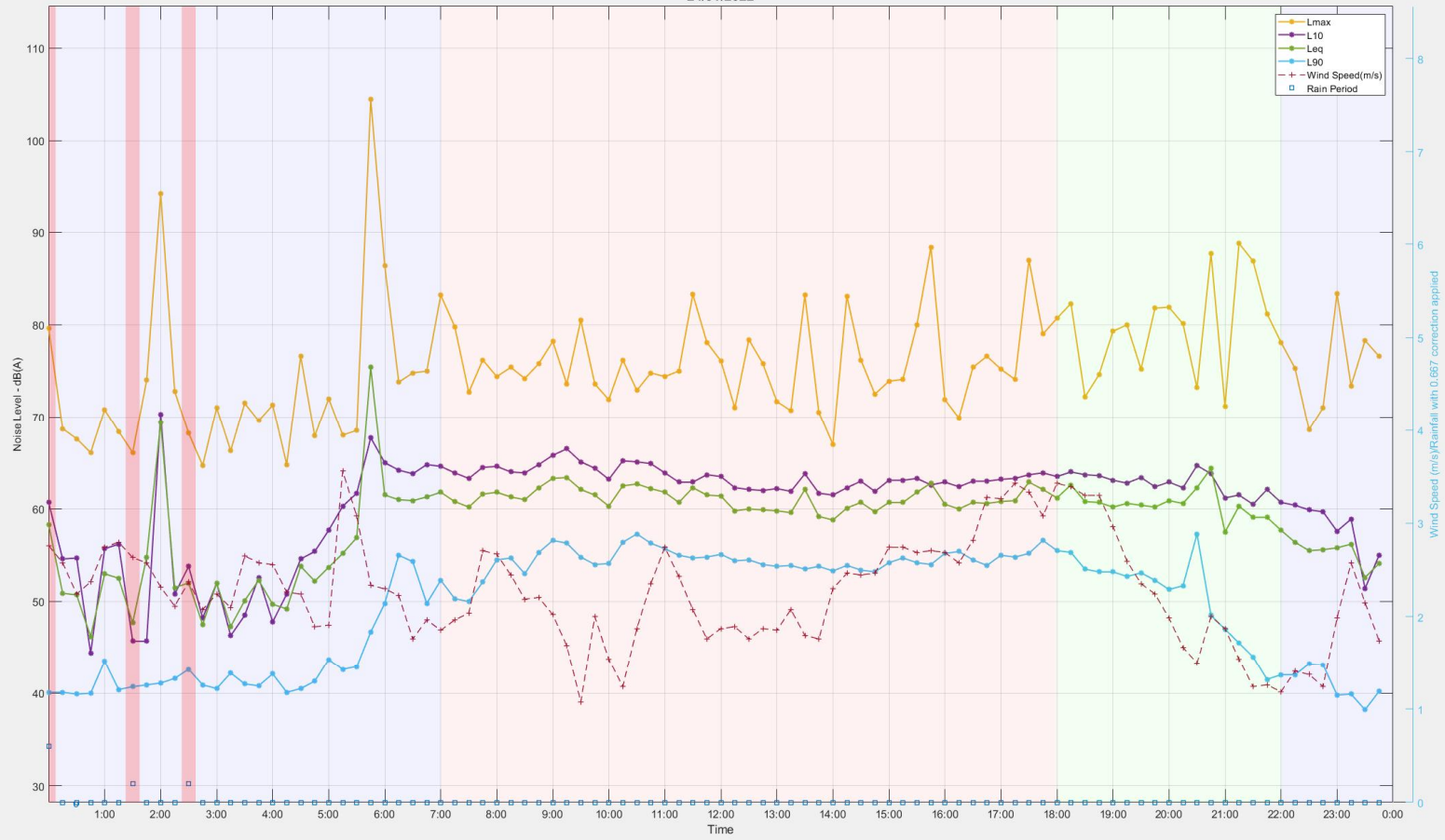
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22/01/2022



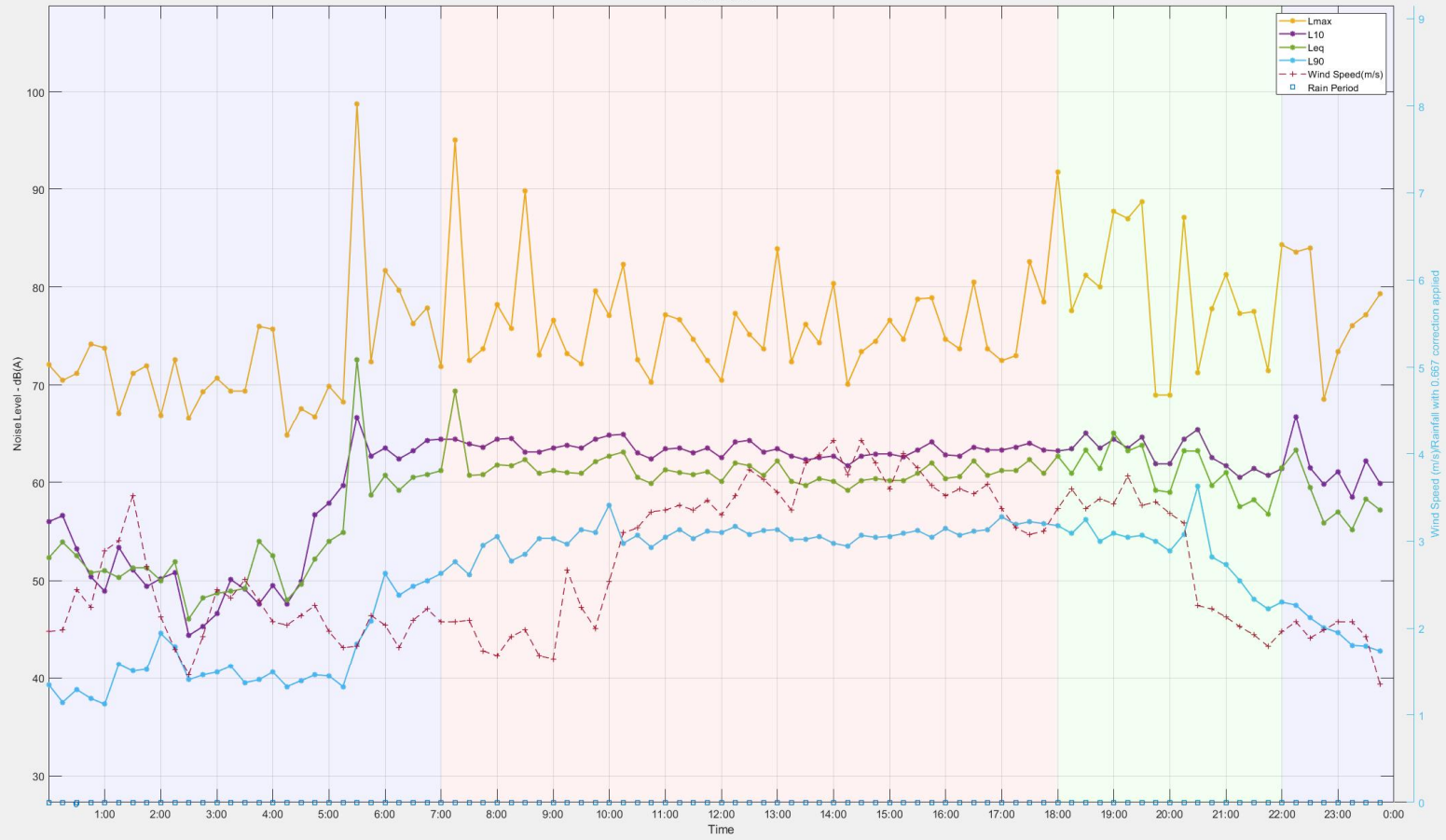
Location 2 - 303-304 & 282-298 Lawrence Hargrave Drive, Thirroul
23/01/2022



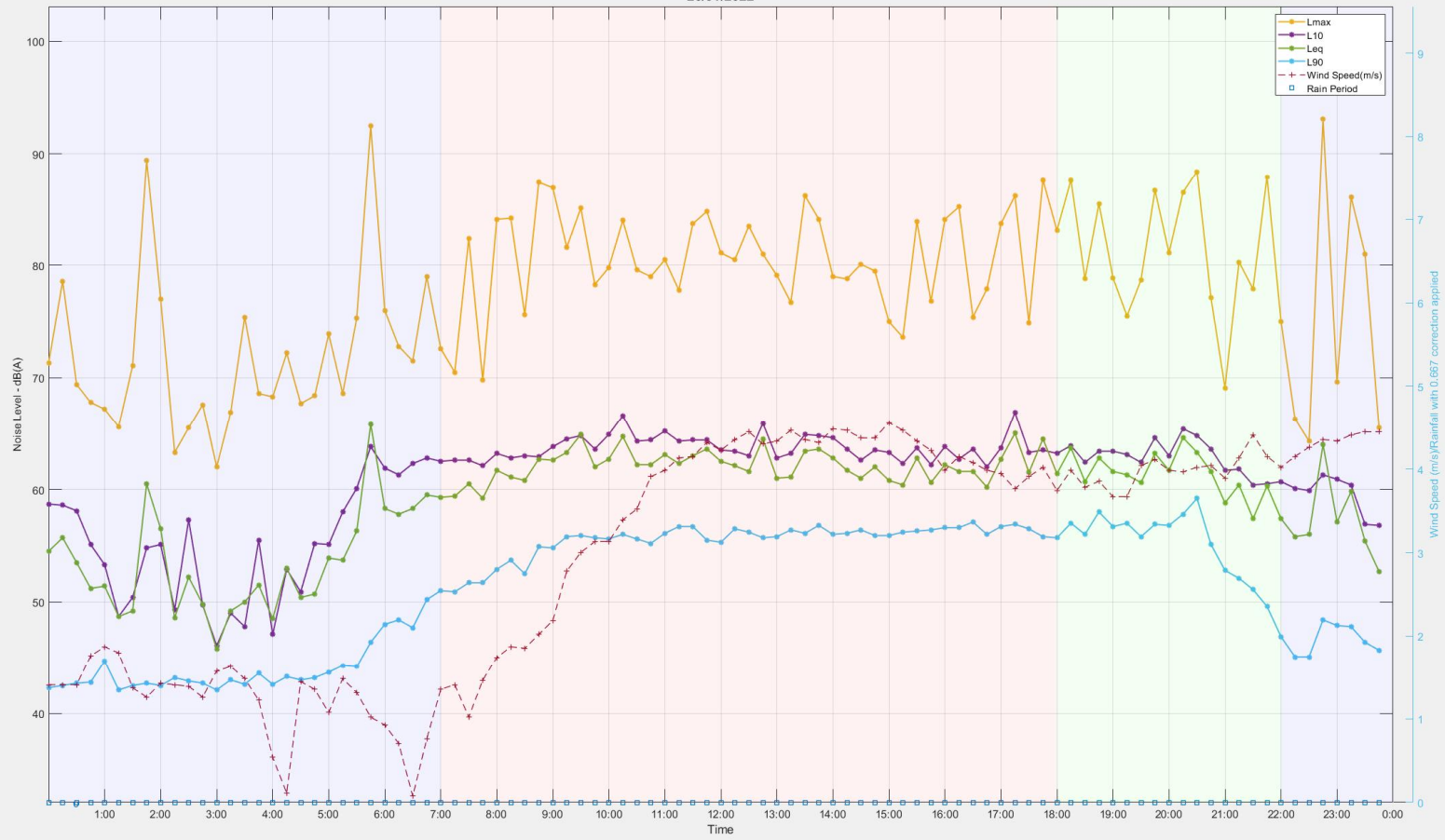
Location 2 - 303-304 & 282-298 Lawrence Hargrave Drive, Thirroul
24/01/2022



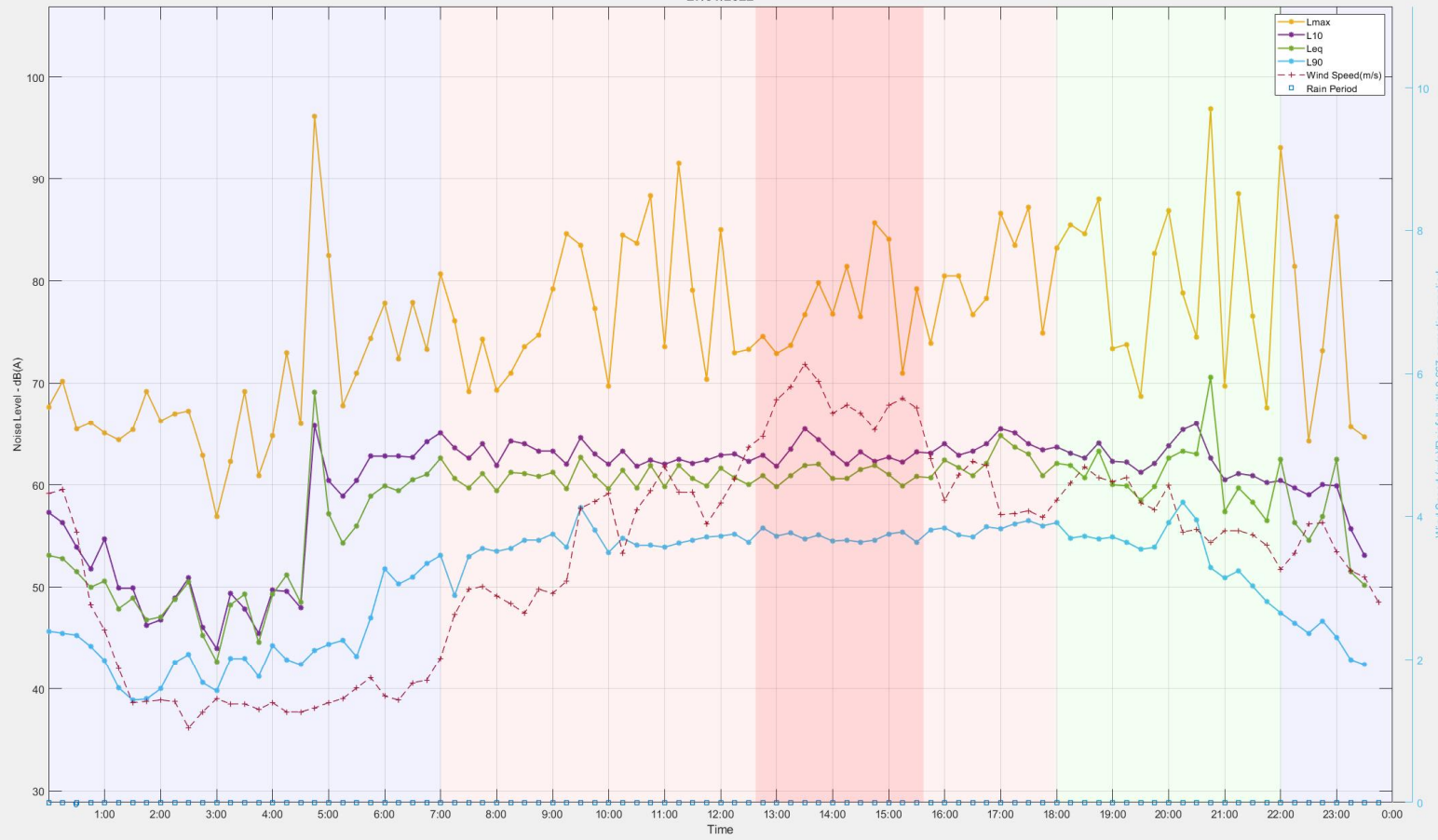
Location 2 - 303-304 & 282-298 Lawrence Hargrave Drive, Thirroul
25/01/2022



Location 2 - 303-304 & 282-298 Lawrence Hargrave Drive, Thirroul
26/01/2022



Location 2 - 303-304 & 282-298 Lawrence Hargrave Drive, Thirroul
27/01/2022



APPENDIX B – PREVIOUS BEACHES HOTEL MONITORING

303-304 & 282-298 Lawrence Hargrave Drive, Thirroul

Beaches Hotel Noise Monitoring

Project ID	20190937.2
Document Title	Beaches Hotel Noise Monitoring
Attention To	Rocking Horse Construction Pty Ltd

Revision	Date	Document Reference	Prepared By	Checked By	Approved By
0	9/02/2021	20190937.2/0902A/R0/KB	KB		VF

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1 INTRODUCTION

Acoustic Logic Consultancy (ALC) has conducted unattended monitoring of noise emissions from the Beaches Hotel, Thirroul as part of the development application for the proposed mixed-use development at 303-304 & 282-298 Lawrence Hargrave Drive, Thirroul. Due to limited events held at the hotel over the past year it was not possible to conduct measurements of noise emissions from the hotel. Measurements have now been conducted to supplement calculations presented in the Noise Impact Assessment for the development (report reference: 20190937.1/0607A/R3/KB).

2 SITE DESCRIPTION

The Beaches Hotel is located adjacent to the proposed development site, the unattended monitor was placed at the boundary between the sites on the roof of the existing buildings. The proposed development has three levels of residential apartments overlooking the hotel. The logger location was representative of the boundary of the worst affect residential receiver within the development.



Figure 1: Site Location

Table 2 – Background Spectrums (no event noise)

Event Date	31.5Hz	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	L90 dB(A)
25/12/2020 21:30	49	48	44	42	39	36	33	25	18	42
26/12/2020 00:30	44	40	40	37	34	32	27	22	17	35

Table 3 – Event Noise Emissions Spectrums

Event Date	31.5Hz	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	L10 dB(A)
26/12/2020 19:30	68	66	63	57	58	58	55	49	37	62
27/12/2020 20:45	67	71	71	63	61	59	56	55	41	65
31/01/2020 21:30	68	69	66	61	62	61	56	50	40	65
01/01/2021 00:45	68	70	65	59	61	59	55	47	36	63
03/01/2021 20:45	70	69	66	61	61	61	56	58	49	65

*loudest 15minute period during the event from amplified music and patron noise

5 NOISE INTRUSION ASSESSMENT

Calculations of noise intrusion from entertainment noise to the most affected bedroom are presented below. Calculations have taken into account orientation of the façade, transmission loss of the specified glazing and barrier effect of the building. Calculations indicate that noise from events at the Beaches Hotel will be more than 10dB(A) below the internal noise level criteria of 35 dB(A).

Table 4 – Entertainment Noise to A102 Bed 3

	31.5Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L10 dB(A)
Event Noise	68	69	66	61	62	61	56	50	40	65
Correction to facade	-3	-3	-3	-3	-3	-3	-3	-3	-3	
Barrier effect of building	-4	-4	-4	-4	-3	-3	-2	-1	0	
Area Correction for Glazing	10	10	10	10	10	10	10	10	10	
TL of 6mm/100 airgap/10.38 lam glazing	-27	-26	-31	-36	-44	-57	-56	-71	-80	
Room Correction	2	3	4	5	6	7	8	8	9	
Internal Noise Level	43	44	35	24	17	2	-1	-23	-42	23

6 CONCLUSION

Monitoring of noise emissions from the Beaches Hotel, Thirroul was conducted by Acoustic Logic Consultancy from the 23rd December 2020 to the 7th January 2021. Monitoring was conducted to supplement the Noise Impact Assessment for the proposed mixed use development adjacent to the hotel at 303-304 & 282-298 Lawrence Hargrave Drive, Thirroul. A total of six events were held at the Beaches Hotel during the monitoring period. Results from events, not affected by adverse weather, indicate that emissions from the hotel do not exceed 65dB(A) at the commercial boundary. The monitoring has indicated that the measured levels are consistent with assumptions presented in the Noise Impact Assessment (report reference: 20190937.1/0607A/R3/KB) and that the specified glazing is sufficient to control noise from entertainment noise.

We trust this information is satisfactory. Please contact us should you have any further queries.

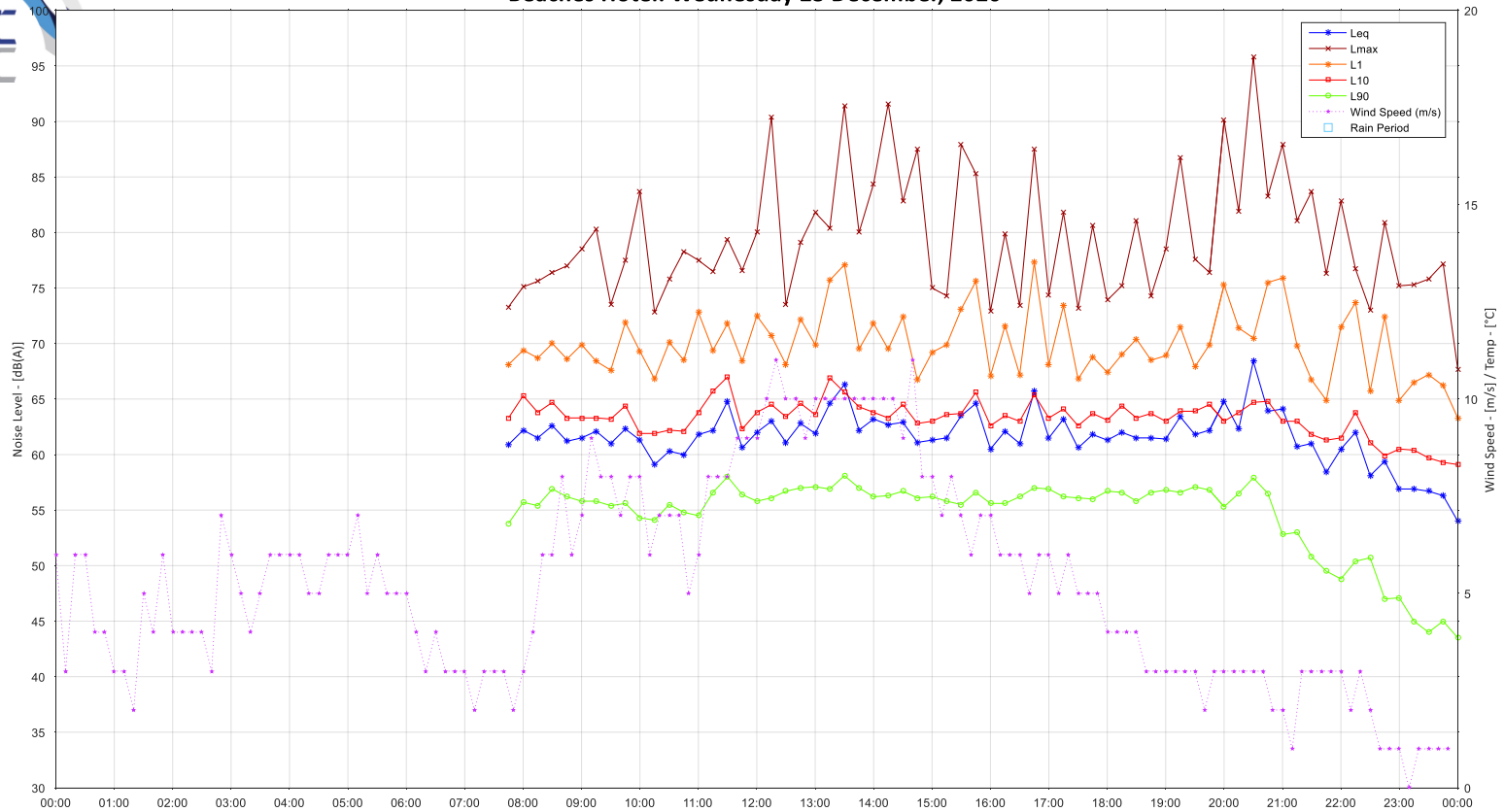
Yours faithfully,



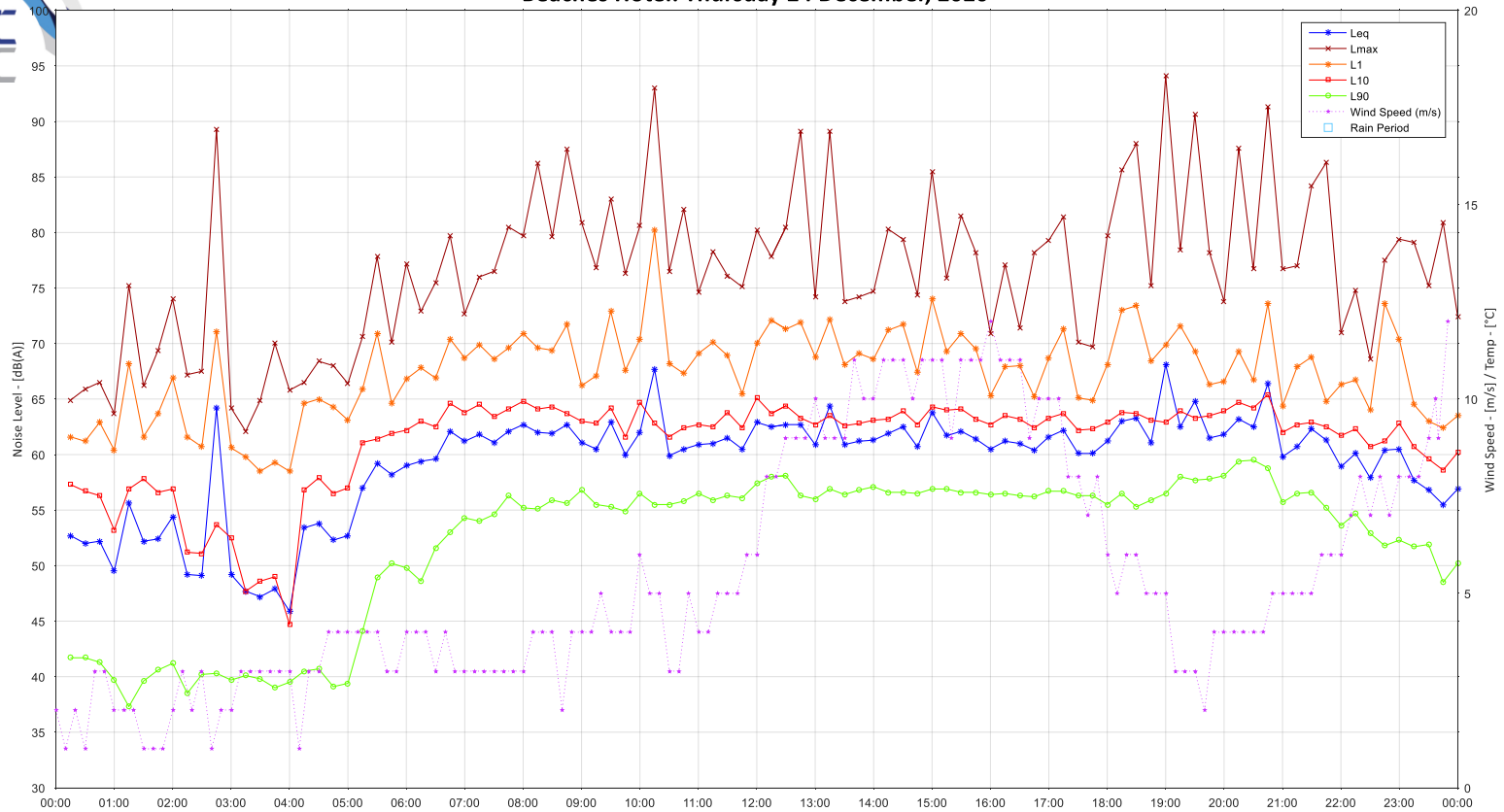
Acoustic Logic Consultancy Pty Ltd
Katherine Beeston

APPENDIX A – RAW MONITORING DATA

Beaches Hotel: Wednesday 23 December, 2020

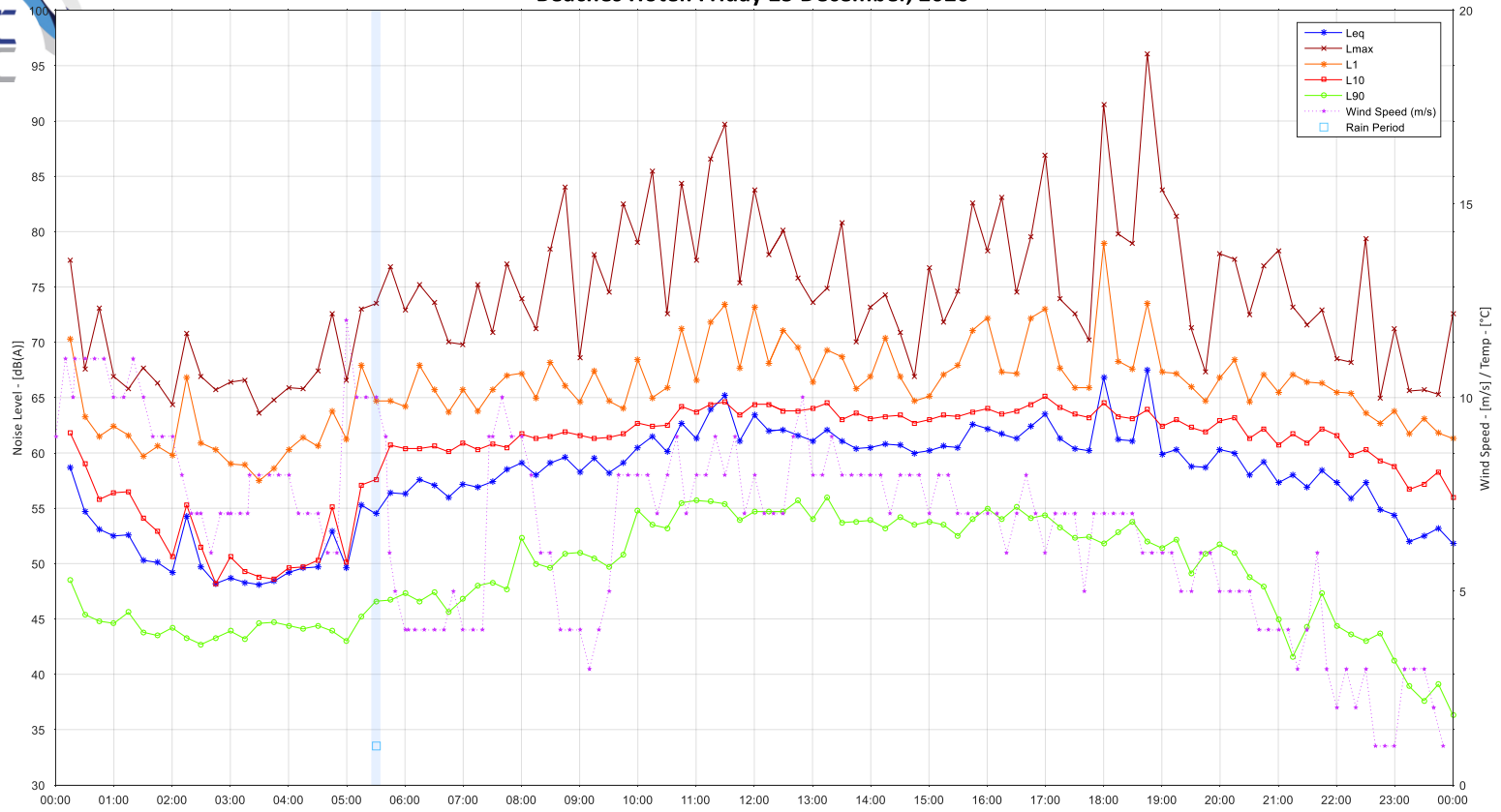


Beaches Hotel: Thursday 24 December, 2020

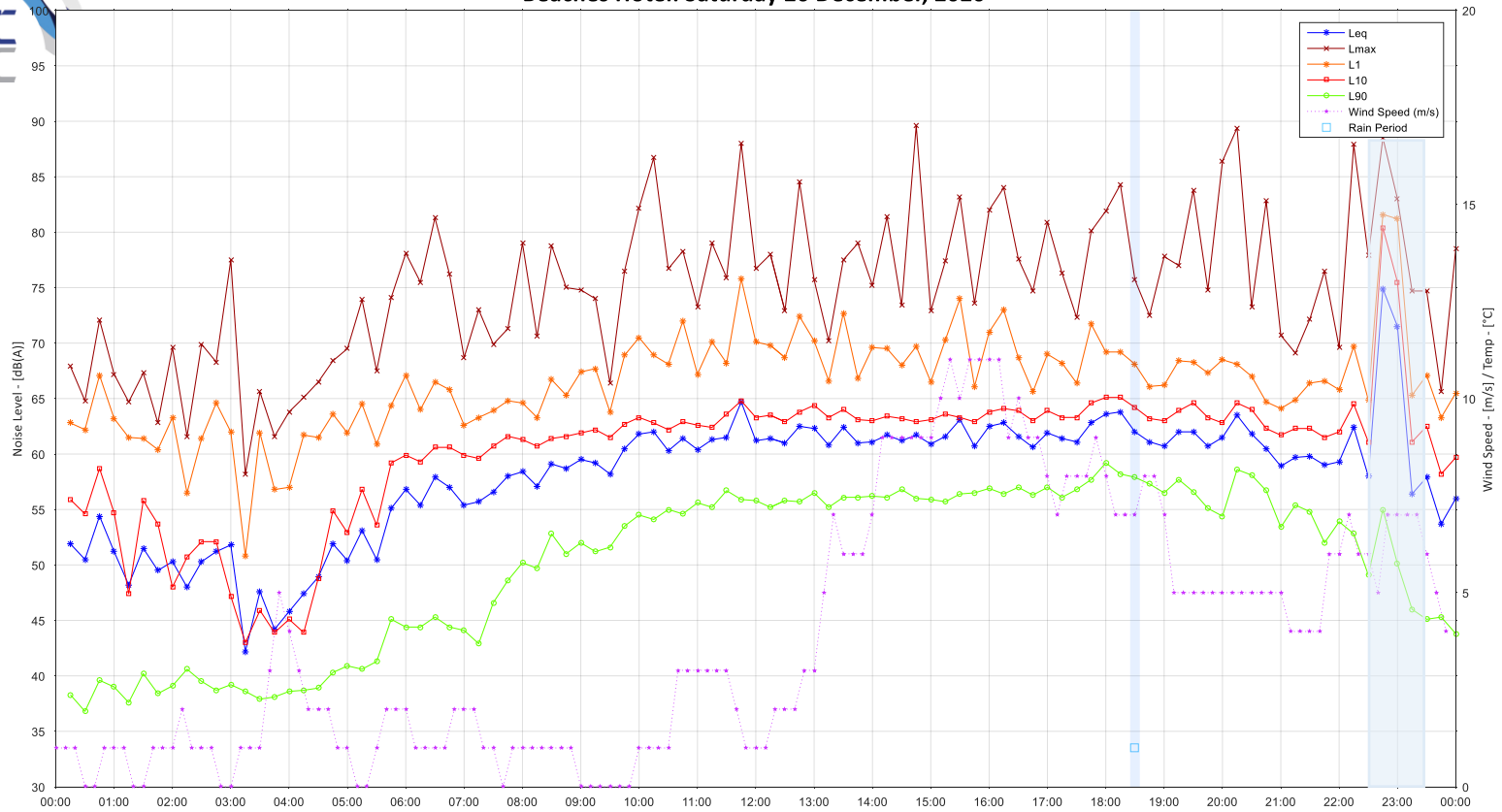




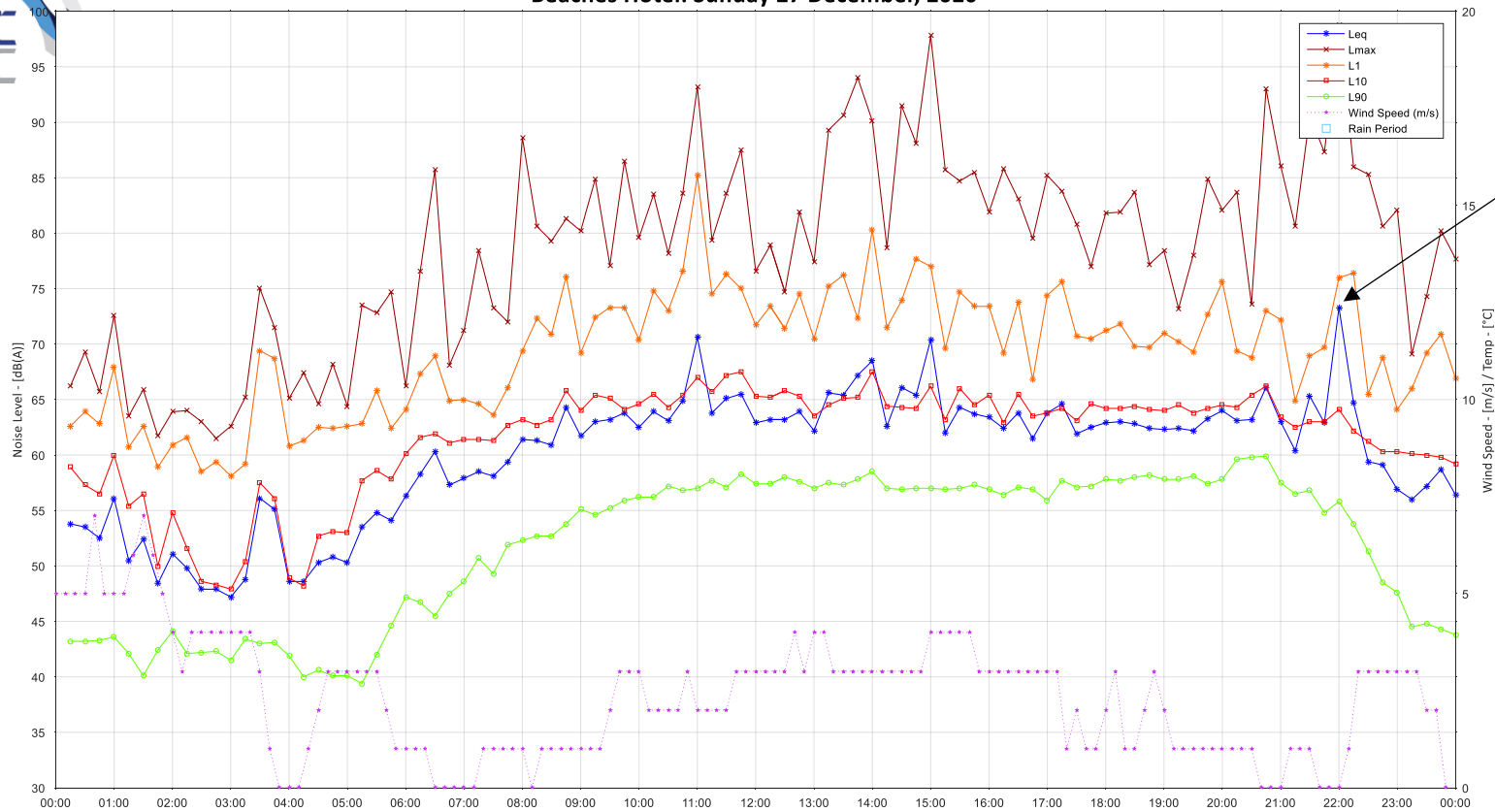
Beaches Hotel: Friday 25 December, 2020



Beaches Hotel: Saturday 26 December, 2020



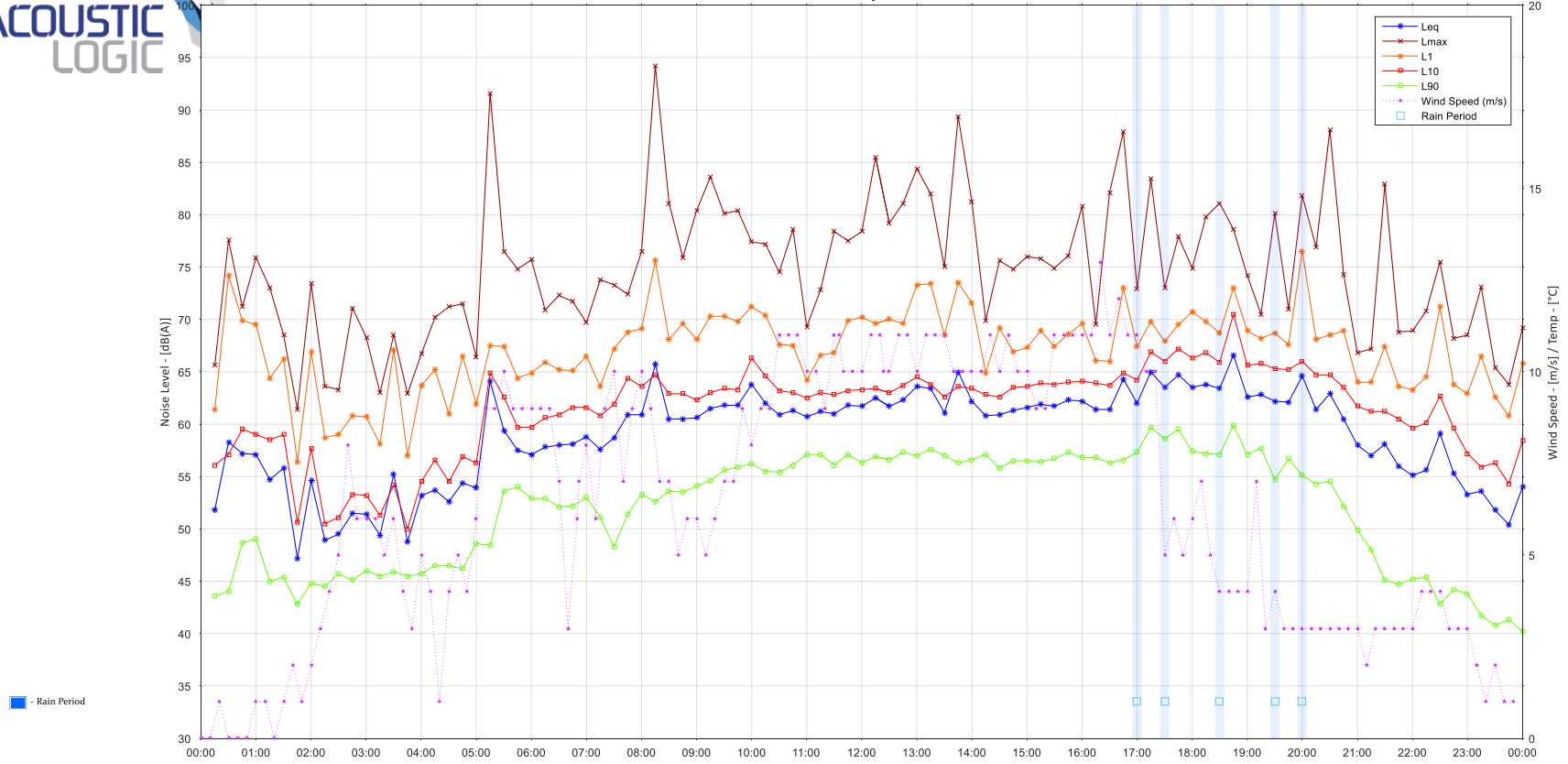
Beaches Hotel: Sunday 27 December, 2020



Glass Disposal
21:58

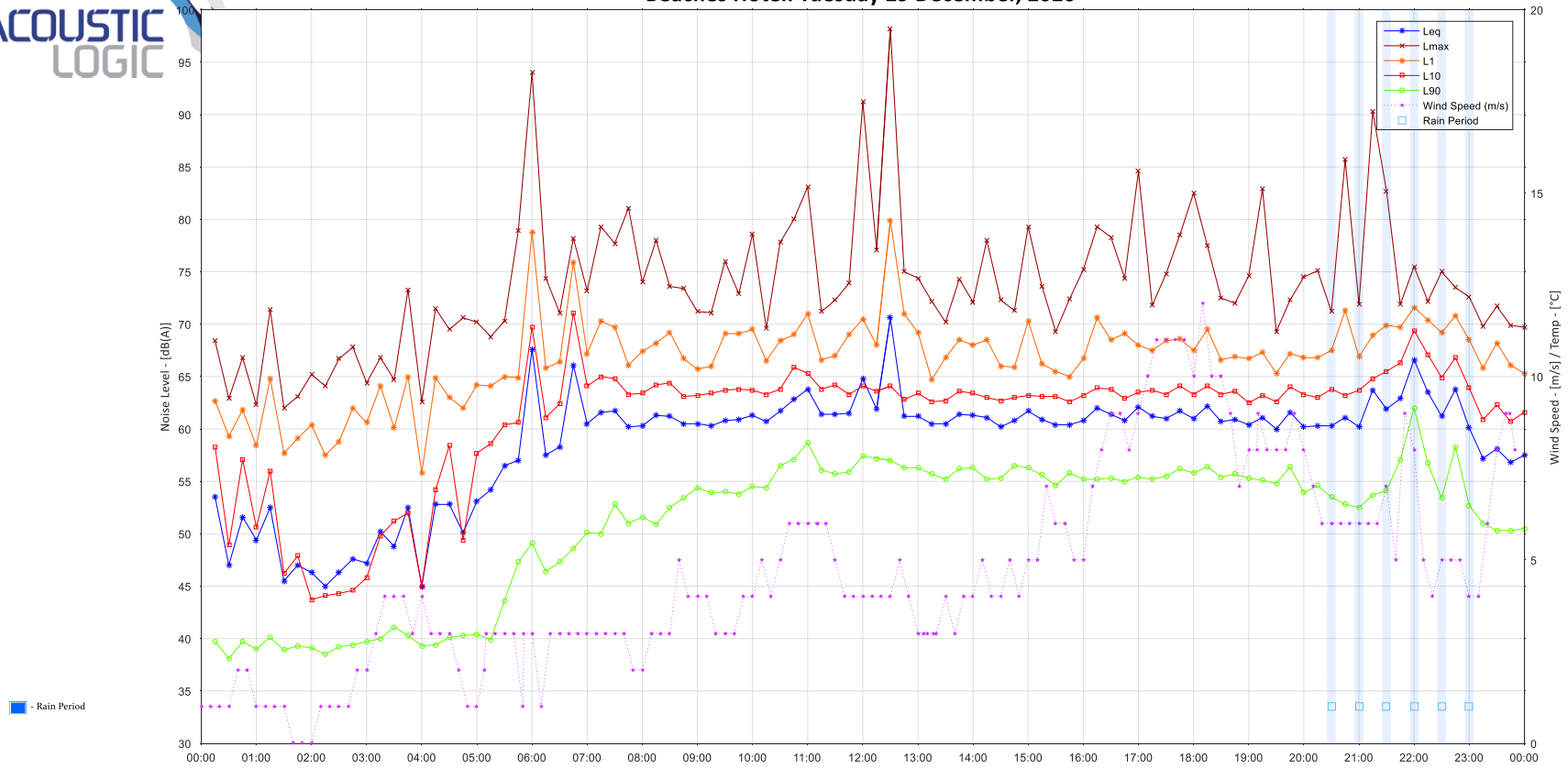


Beaches Hotel: Monday 28 December, 2020

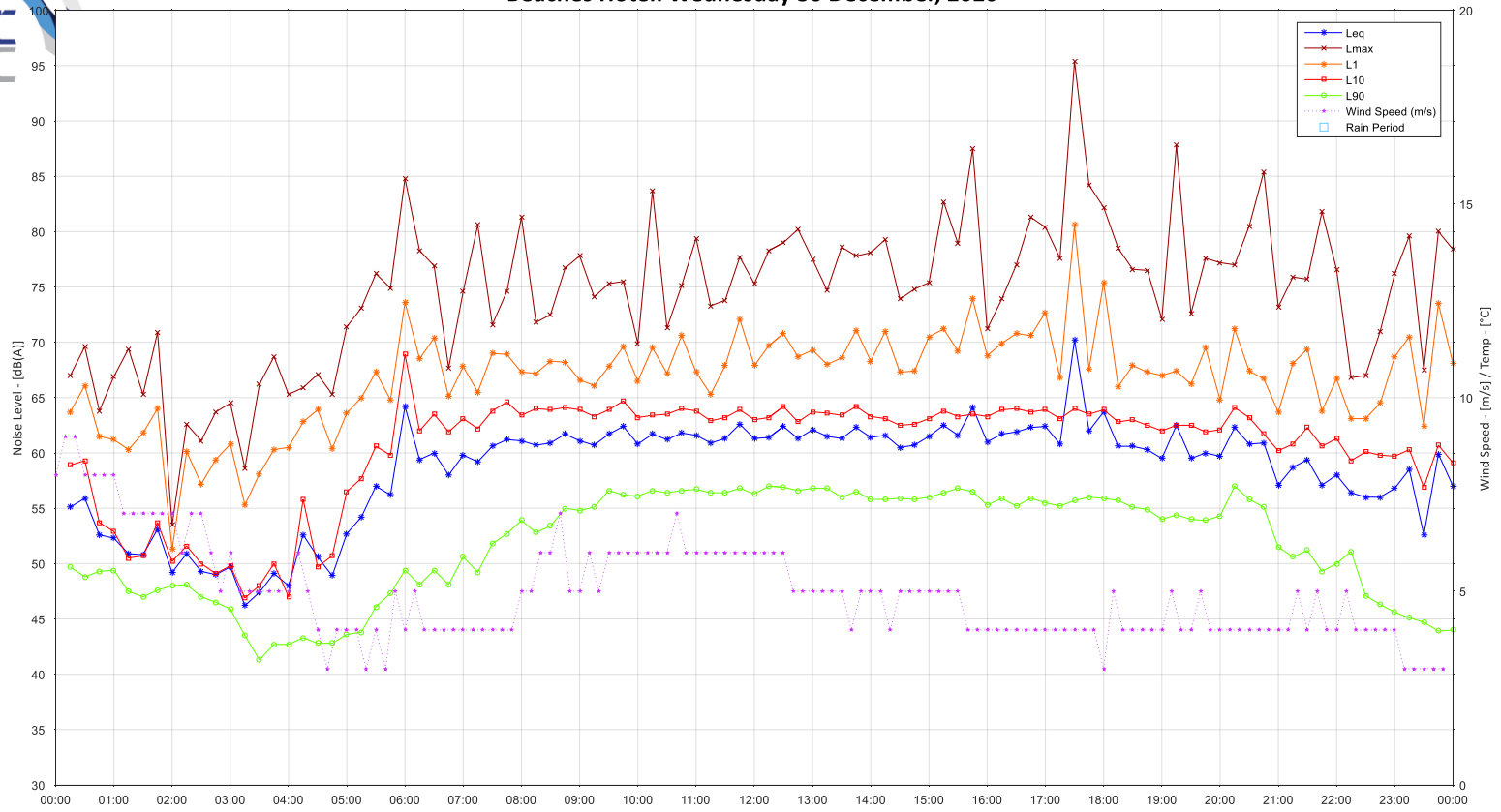




Beaches Hotel: Tuesday 29 December, 2020

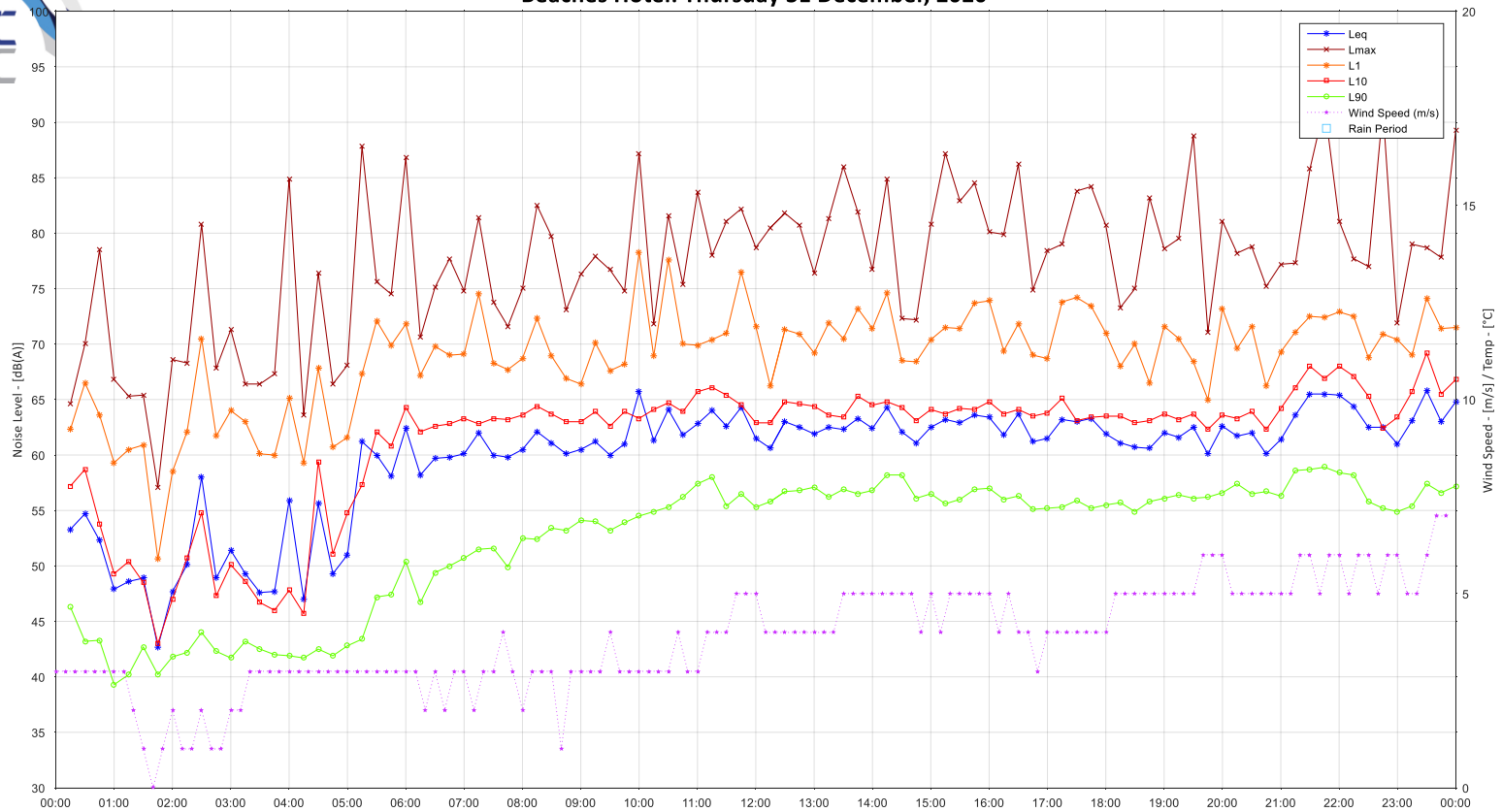


Beaches Hotel: Wednesday 30 December, 2020

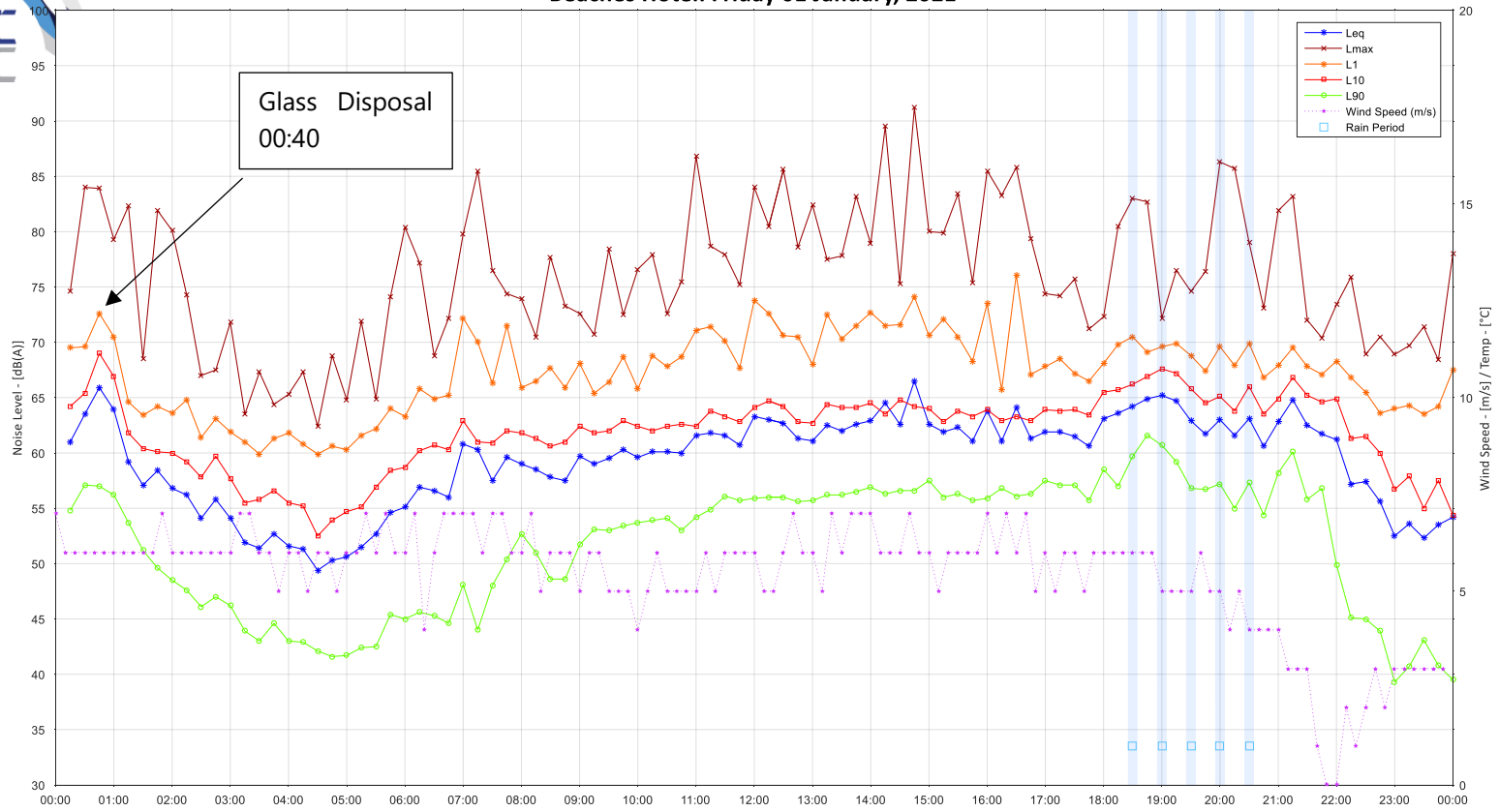




Beaches Hotel: Thursday 31 December, 2020

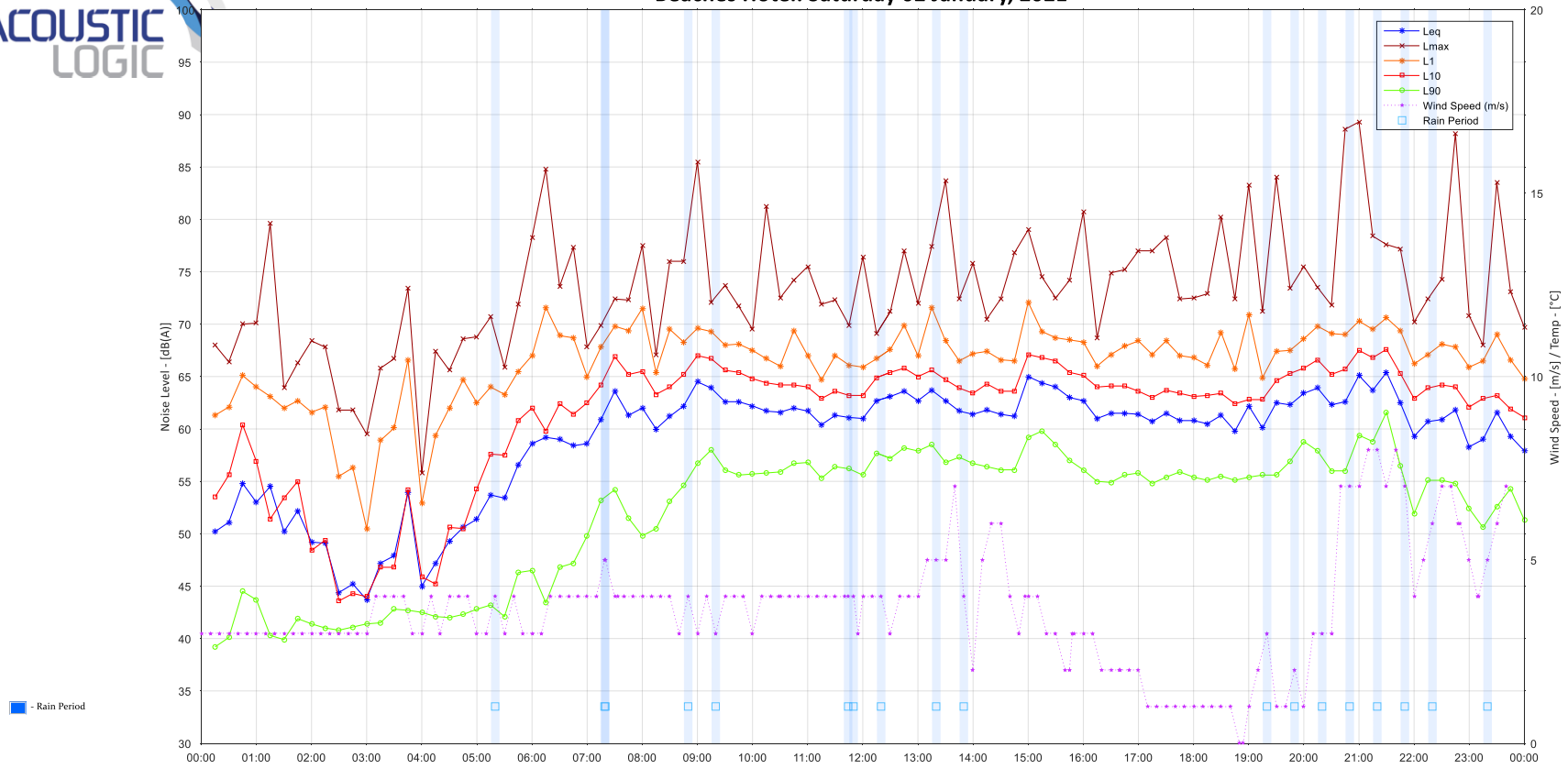


Beaches Hotel: Friday 01 January, 2021



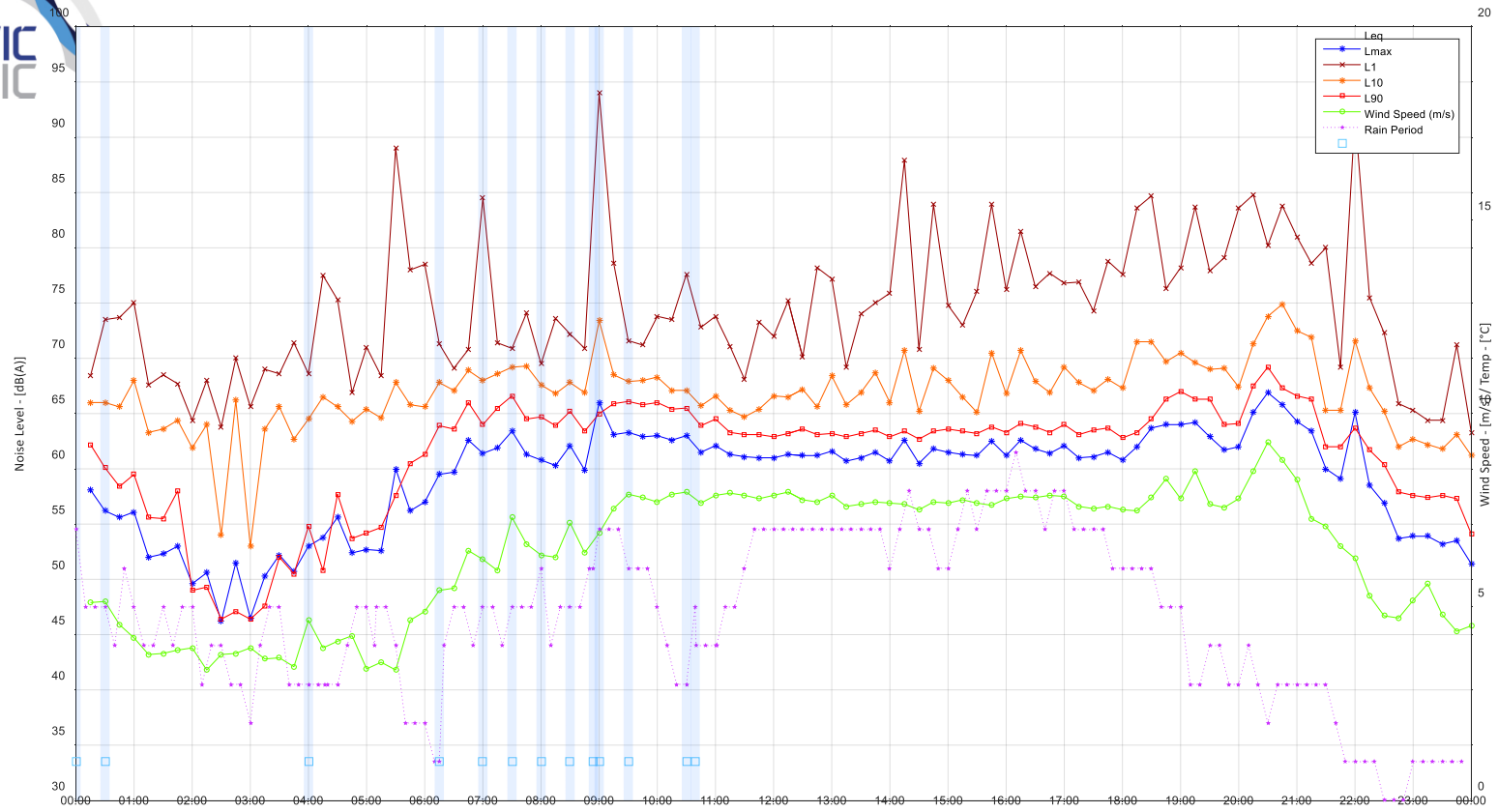


Beaches Hotel: Saturday 02 January, 2021



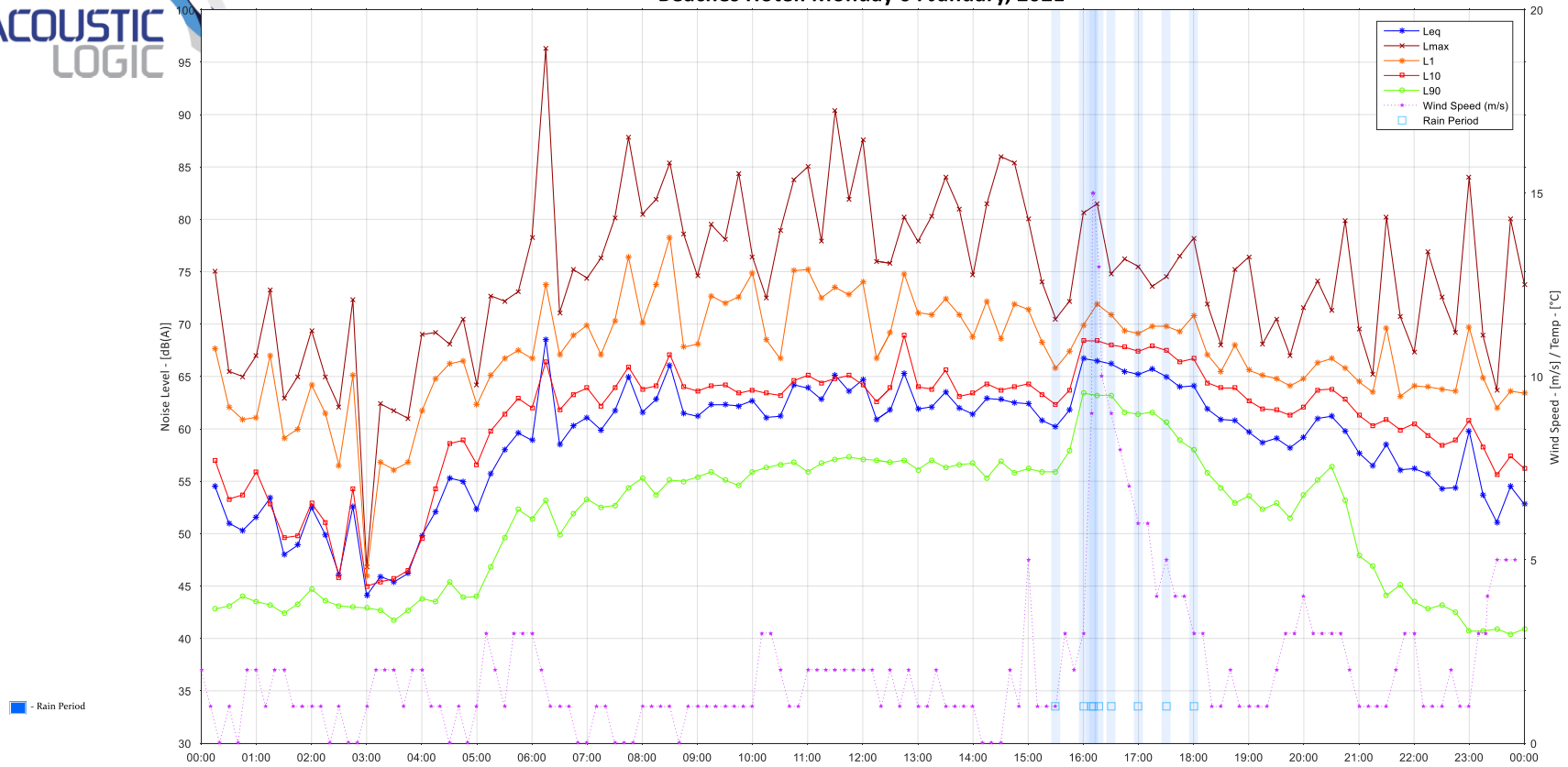


Beaches Hotel: Sunday 03 January, 2021



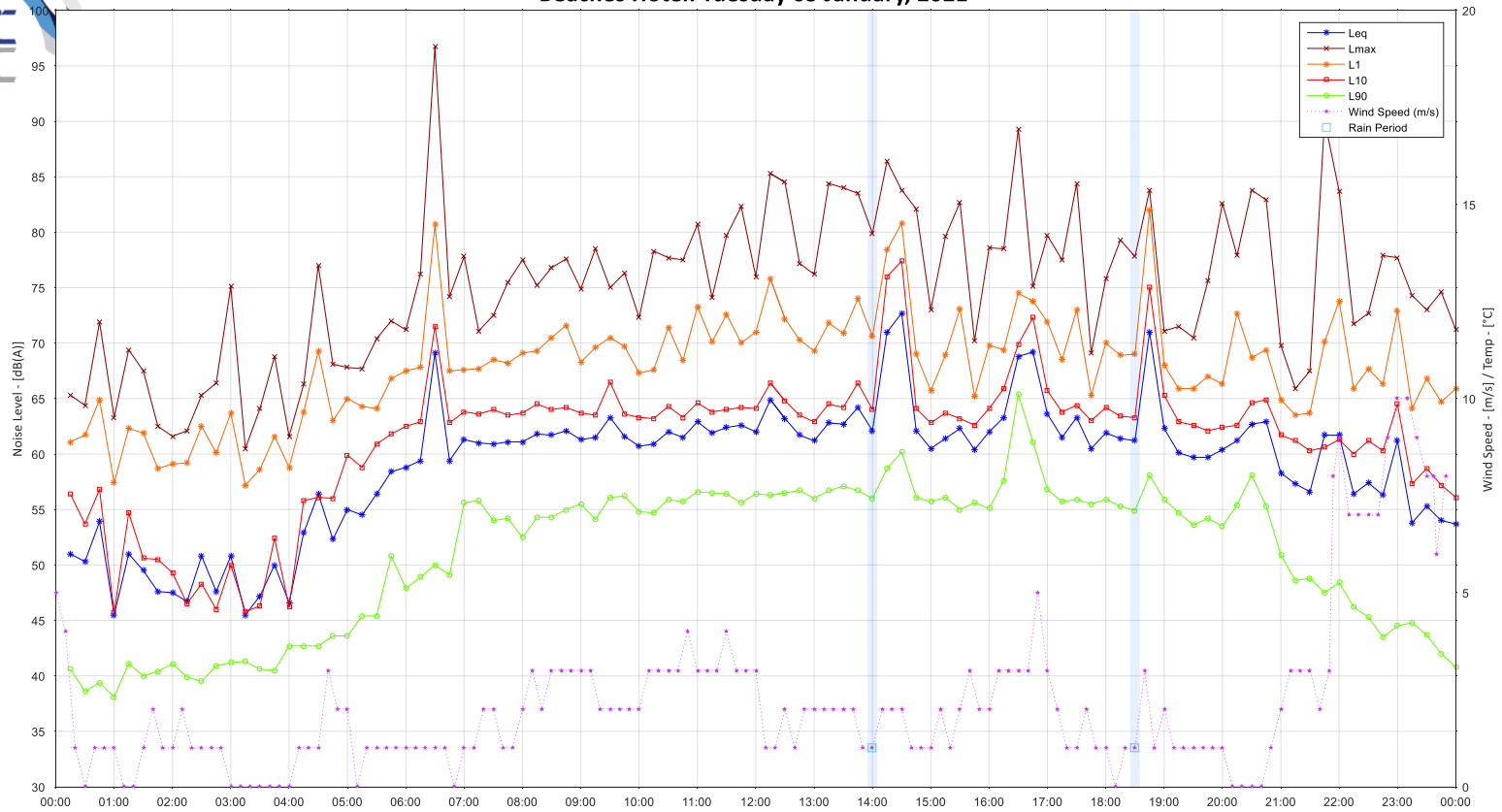


Beaches Hotel: Monday 04 January, 2021



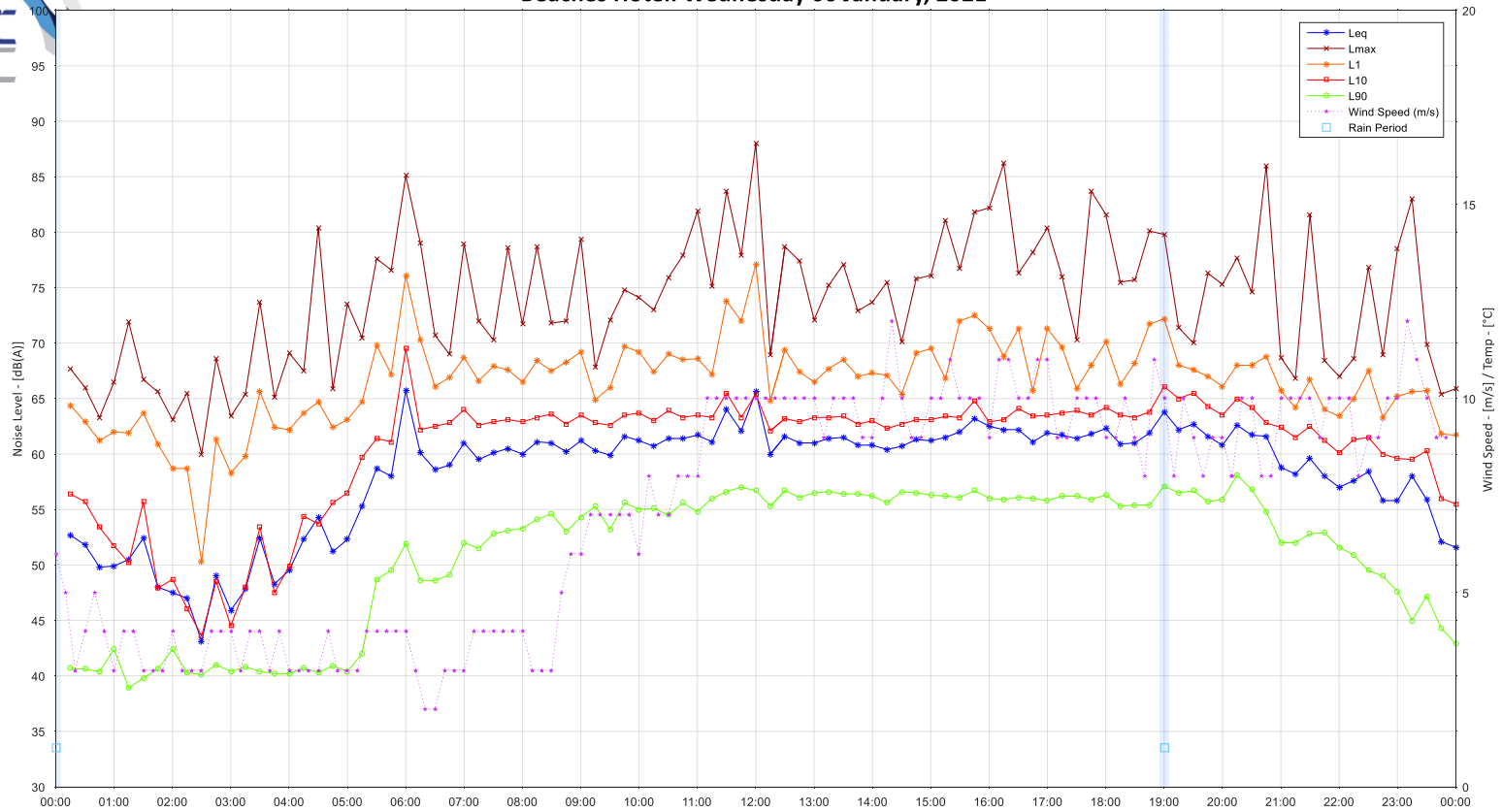


Beaches Hotel: Tuesday 05 January, 2021



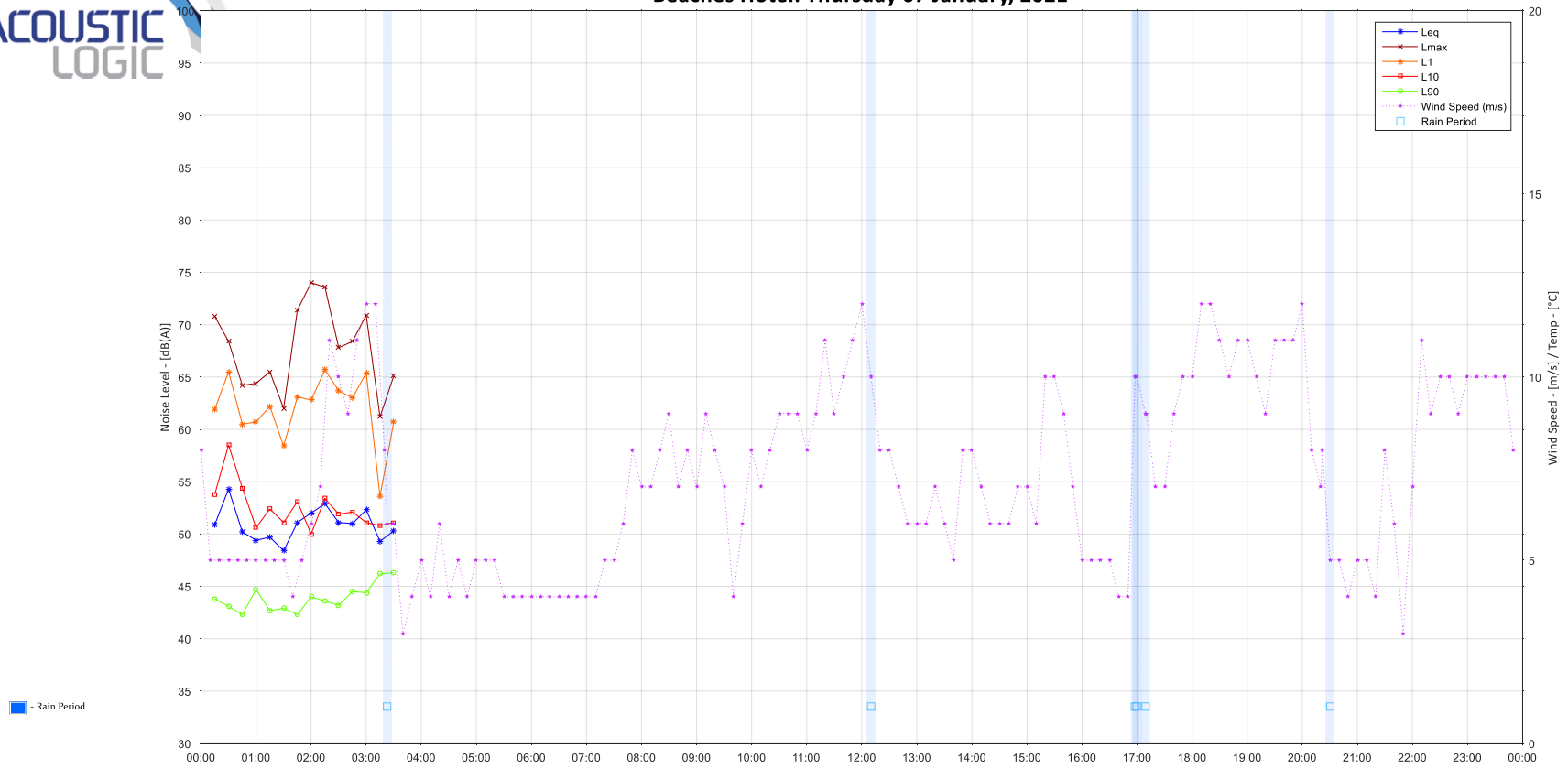


Beaches Hotel: Wednesday 06 January, 2021

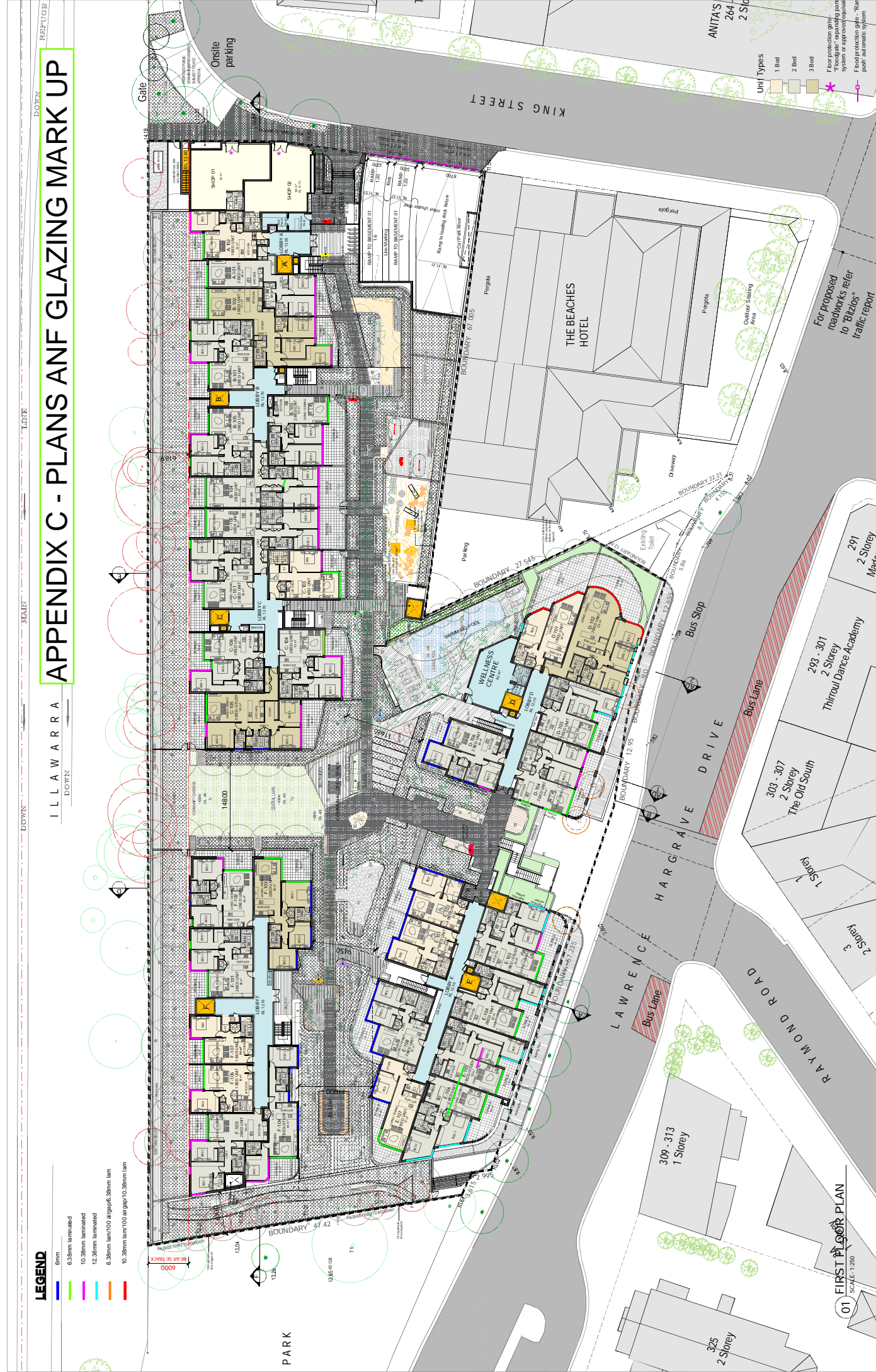




Beaches Hotel: Thursday 07 January, 2021



ILLAWARRA APPENDIX C - PLANS ANF GLAZING MARK UP



- LEGEND**
- 6mm
 - 6.38mm laminated
 - 10.38mm laminated
 - 12.38mm laminated
 - 6.38mm laminated @ rigipak, 38mm lam
 - 10.38mm laminated @ rigipak, 38mm lam

01 FIRST FLOOR PLAN
SCALE: 1:250

Client	Thirroul Plaza Pty. Ltd.
Project Name	MIXED USE DEVELOPMENT
Project Address	303-304 & 282, 298 Lawrence Hargrave Dr. THIRROUL, NSW 2172
Architect	LOUCAS ARCHITECTS Level 3, 303-304, 298 Lawrence Dr. Batemans Bay NSW 2549 Tel: (02) 8032 9600 Email: admin@loucas.arch.au Jenny Archibald Pty Ltd Jenny Archibald Pty Ltd
Drawings	PH-17002
Revision	A-140
Authority	AUTHORITY APPROVAL
Issue	F
Scale	1:250 (A1) 1:500 (A3)
Date Printed	09/02/2022
Issue	REVISED DRAWING

For proposed roadworks refer to 'Bizlogs' traffic report





- LEGEND**
- 6mm
 - 6.38mm laminated
 - 10.38mm laminated
 - 12.38mm laminated
 - 6.38mm lam/100 airgap/6.38mm lam
 - 10.38mm lam/100 airgap/10.38mm lam

01 THIRD FLOOR PLAN
SCALE: 1:250

Project Number:	Ph-17002	Client:	Thirroul Plaza Pty. Ltd.
Drawn By:	A-160	Project Name:	MIXED USE DEVELOPMENT
Authority Approval:	F	Address:	303-304 & 282, 298 Lawrence Hargrave Dr. THIRROUL, NSW 2172
Architect:	LOUCAS ARCHITECTS JAM 2024/2022 Level 5, 346-303, 305 Makers St, Redfern NSW Australia Tel: 02 9515 9600 Email: admin@loucas.com.au Norman Architects Jam Architects Pty	Architects:	LOUCAS ARCHITECTS JAM 2024/2022 Level 5, 346-303, 305 Makers St, Redfern NSW Australia Tel: 02 9515 9600 Email: admin@loucas.com.au Norman Architects Jam Architects Pty
Scale:	1:250@A1 1:500@A3	Issue:	REVISED DRAWING
Date Print:	09/02/2022	Issue:	REVISED DRAWING



Scale: 1:250@A1 1:500@A3
Date Print: 09/02/2022

Unit Types
1 Bed
2 Bed
3 Bed

Project Number: Ph-17002
Drawn By: A-160
Authority Approval: F

Client: Thirroul Plaza Pty. Ltd.
Project Name: MIXED USE DEVELOPMENT
Address: 303-304 & 282, 298 Lawrence Hargrave Dr. THIRROUL, NSW 2172

Architect: LOUCAS ARCHITECTS
JAM 2024/2022
Level 5, 346-303, 305 Makers St, Redfern NSW Australia
Tel: 02 9515 9600
Email: admin@loucas.com.au
Norman Architects
Jam Architects Pty

Scale: 1:250@A1 1:500@A3
Date Print: 09/02/2022

Issue: REVISED DRAWING

Issue: REVISED DRAWING