



Dun Laoghaire/Rathdown County Council

**Queen 8th July, Bruno Mars 12th July & Longitude Festival 13th to 15th July
2018**

Marlay Park, Dublin

Title: Sound level measurements at Noise Sensitive locations surrounding Marlay Park while the Concerts are being held at the park.

Measurement Taken: At the nearest noise sensitive locations (NSL's) within the vicinity of Marlay Park.

Equipment Used: Hand Held Analyser, Bruel & Kjaer 2250 Light, Sound Level Meter

Prepared by: Noise Unit, DLRCC

Summary

The Noise Unit at Dun Laoghaire/Rathdown Co. Council has been requested to perform a noise assessment investigation for the Concerts being held at Marlay Park 2018.

This report details the equipment and measurement methods employed and presents an acoustic analysis of all data collected.

Objectives

The technical assessments were carried out:

1. To determine the ambient noise environment and background noise levels at the noise sensitive location(s) (NSL's) where monitoring has been carried out.
2. To relate the music noise level from the Marlay Parks Concerts to the noise conditions set down in the planning application and show a reasonable cause for annoyance or otherwise.
3. To assess if the complaints logged by local residents are justified.

Introduction

Marlay Park is located in Dun-laoghaire/Rathdown Co. Council and was used for concerts on 8th July, 12th July & Longitude Festival concerts on Friday, 13th July to Sunday, 15th July 2018.

The condition relating to the event states that “The music noise level should not exceed 72dB (A) LAeq, over a fifteen-minute period, at one meter from the façade of any noise sensitive premises for events being held”

Description of the Noise Source

There is a stone wall approximately 1.5 – 2 metres high running along the park boundary between the nearest noise receptor location and the noise source. There are some tall trees and wooded areas within the park.

The primary noise nuisance is from the live and recorded music featured on a single stage on -8th & 12th July with music from approximately 5.30pm -11.00pm.

-13th -15th July multiple stages with live music between approximately 2:00pm and 11:00pm.

Description of the Noise Receiver

The closest noise sensitive area is situated on the Grange Road to the north and east of the park. Residents living in the area include young and old families.

Noise Equipment Specifications

Type: Class 1, 2250 Light, Hand-held analyser, Sound Level Meter (SLM)

Type: 4231 Class 1 Acoustic Calibrator

Manufacturer: Bruel & Kjaer

Weighted Setting: A-Weighting

Meter Response Time: Fast

Serial Numbers: 2638896 / 3007403

Meteorological Conditions

Meteorological conditions can have a substantial influence on the propagation of sound and may provide important information for assessing noise compliance and a noise complaint. Wind speed and wind direction have the potential to affect the noise measurements. An average wind speed of less than 5m/s is the preferred limit when noise measurements are being taken.

The prevailing weather conditions at the time of measurement has been noted and recorded in the report. These occurrences may influence the final noise reading.

Date	Conditions	Temperature oC	Wind speed
8 th July	Dry, Warm	24.9	2.78 m/s
12 th July	Drizzle, wind	19	3.14 m/s
13 th July	Dry, warm	21	2.32m/s
14 th July	Dry, Warm	26	3.14m/
15 th July	Drizzle, warm	19	3.1m/s

External Influences and limitations

Precautions were put in place to minimise outside interference. These include covering the microphones with a wind shield to minimise outside interference and the pausing the SLM if deemed necessary.

The Grange Road runs to the north and east of the Park. This appears to be a busy road to the north of the park with fewer vehicles using the eastern part of the road.

The M50 motorway runs approximately east to west to the south of the Park.

Road traffic noise, crowd noise were noted during the course of each monitoring session. These occurrences may influence the final noise reading.

Methodology

Noise levels were measured by a competent person for environmental noise monitoring, in accordance with EPA Environmental Noise Guidance Document and International Standard ISO 1996: Acoustics Description & Measurement of Environmental Noise.

Monitoring Position & Measurement Set Up

The sound level meters were calibrated before site visit and recordings were carried out.

Parameters Used on the SLM: Ambient Noise Levels, LAeq, and Background Noise.

Location of Sound Level Meter: Free-Field

The recorder was placed at least 3.5m from any wall or large reflecting surface.

SLM: 1.2 -1.5metres in height

Windshield Used: Yes

Orientation: Pointing the microphone at the noise source.

Results

Date & Time	Location	dB level Laeq,T	Duration
8th July			
19:00	Heather Lawn	59.7	15 min
19:10	Grange Wood	59.9	15 min
20:00	Pine Valley	55.9	15 min
20:10	Highfield	54.6	15 min
21:00	Grange Wood	66.5	15 min
21:10	Pine Valley	63.9	15 min
21.30	Grange Wood	65.3	15 min
12th July			
20:00	Heather Lawn	59.7	15 min
20:08	Pine valley	55.9	15 min
20:15	La Touche Ct	54.6	15 min
21:10	Pine Valley	63.1	15 min
21:26	Grange Wood	70.3	15 min
21:38	Highfield	67.6	15 min
21:40	Grange Wood	69.0	15 min
21.59	Heather Lawn	67.5	15 min
13th July			
15:22	Heather Lawn	63.4	15 min
15:24	Grange Wood	64.2	15 min
16:15	Highfield	59.0	15 min
19:37	La Touche Ct	55.9	15 min
19:57	Heather Lawn	60.2	15 min
20:01	Pine Valley	60.6	15 min
20:24	Highfield	63.0	15 min
20:38	Grange Wood	65.3	15 min
20:49	Highfield	55.0	15 min
21:37	Heather Lawn	63.2	15 min
21:49	Grange Wood	66.6	15 min
22:02	Pine Valley	59.6	15 min
14th July			
15:11	Highfield	62.8	15 min
15:21	Heather Lawn	62.9	15 min
15:28	Grange Wood	64.1	15 min
19:26	La touché Ct	69.0	15 min
19:38	Heather Lawn	65.0	15 min
19:40	Highfield	64.2	15 min
19:58	Grange Wood	68.9	15 min
20:18	Grange Wood	72.0	15 min
20:32	Highfield	66.8	15 min
20:43	Heather Lawn	62.0	15 min
21.01	Grange Wood	65.1	15 min

21:47	Pine Valley	67.2	15 min
15th July			
19:13	La Touche Ct	63.3	15 min
19:26	Grange Wood	65.4	15 min
19:36	Highfield	59	15 min
20:15	Grange Wood	68.7	15 min
20:27	Heather Lawn	65.7	15 min
20:45	Pine Valley	51.1	15 min
21:15	Highfield	53.8	15 min
21:45	Heather Lawn	69.5	15 min

Discussion of Acoustic Analysis

Noise monitoring was carried out by the Noise Unit to determine compliance with the following licensed condition:

“The music noise level should not exceed 72dB (A) LAeq, over a fifteen-minute period, at one meter from the façade of any noise sensitive premises for events being held”.

There was no exceedance of 72dB (A) LAeq, over a fifteen-minute period for any of the monitoring sessions carried out.

Conclusion of Acoustic Analysis

Having given careful consideration to the monitoring readings, the Noise Unit for Dun-Laoghaire/Rathdown Co. Council have concluded that the noise emitted from all concerts 8th July -15th July 2018 complied with the conditions set down in the planning application.
