

ATTACHMENT 6

NOISE SURVEY

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Date: 24th July 2000
Ref: PRM 254

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Baseline Noise Study
At
Carranstown
Co. Meath

For

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Tallagh
Dublin 24

Report by Eanna O'Kelly

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Gavan O'Kelly B.Sc. Applied Physics,

Baseline Noise Study at Industrial Site at Carranstown Co. Meath

1. Noise Monitoring

- 1.1. Continuous unattended noise measurement of the existing ambient noise levels of over ten 24 hour periods was carried out on site over the period 07/07/2000 to 19/07/2000 as follows:

Location : On site at location shown in fig 1., 30 metres back from edge of carraigeway at the R152 opposite two existing residences. This location is equidistant from the carraigeway as the two residences.

- 1.2. The noise parameters measured were as follows:

L_{Aeq} – the equivalent continuous noise level in dBA

L_{A90} – the noise level in dBA equalled or exceeded for 90% of the measuring interval

The measuring interval was 15 minutes.

- 1.3. The noise measurements were carried out in accordance with International Standard 1996 – Acoustics Description and Measurement of Environmental Noise.

Part 1: Basic quantities and procedures.

Part 2: Acquisition of data pertinent to land use

Part 3: Application to noise limits

The instrumentation used consisted of Bruel & Kjaer Precision Integration Sound Level Meters type 2236. These were calibrated using a Bruel & Kjaer Sound Level Calibrator type 4231.

2. Results

2.1. The results of the continuous monitoring are shown in tabular and graphical form in Appendix 1. The results are summarised in Table 1.

Table 1. Summary of continuous noise monitoring on site - Mean value and standard deviation of noise parameters over measuring period 07/07/2000 to 19/07/2000.

		$L_{(Aeq,15\text{ min})}$	$L_{(A90,15\text{ min})}$
Daytime	08:00 to 22:00		
x		61.3dBA	47.3dBA
s.d.		1.6dBA	3.7dBA
Night-time	22:00 to 08:00		
x		55.8dBA	42.5dBA
s.d.		4.1dBA	6.1dBA

2.2. The ambient noise environment is principally due to road traffic during the daytime. At night-time there is some contribution to the ambient noise from the industrial plant.

The mean hourly wind speed and direction data from Met Eireann's meteorological station at Dublin Airport is attached.

Rural PLACE Map

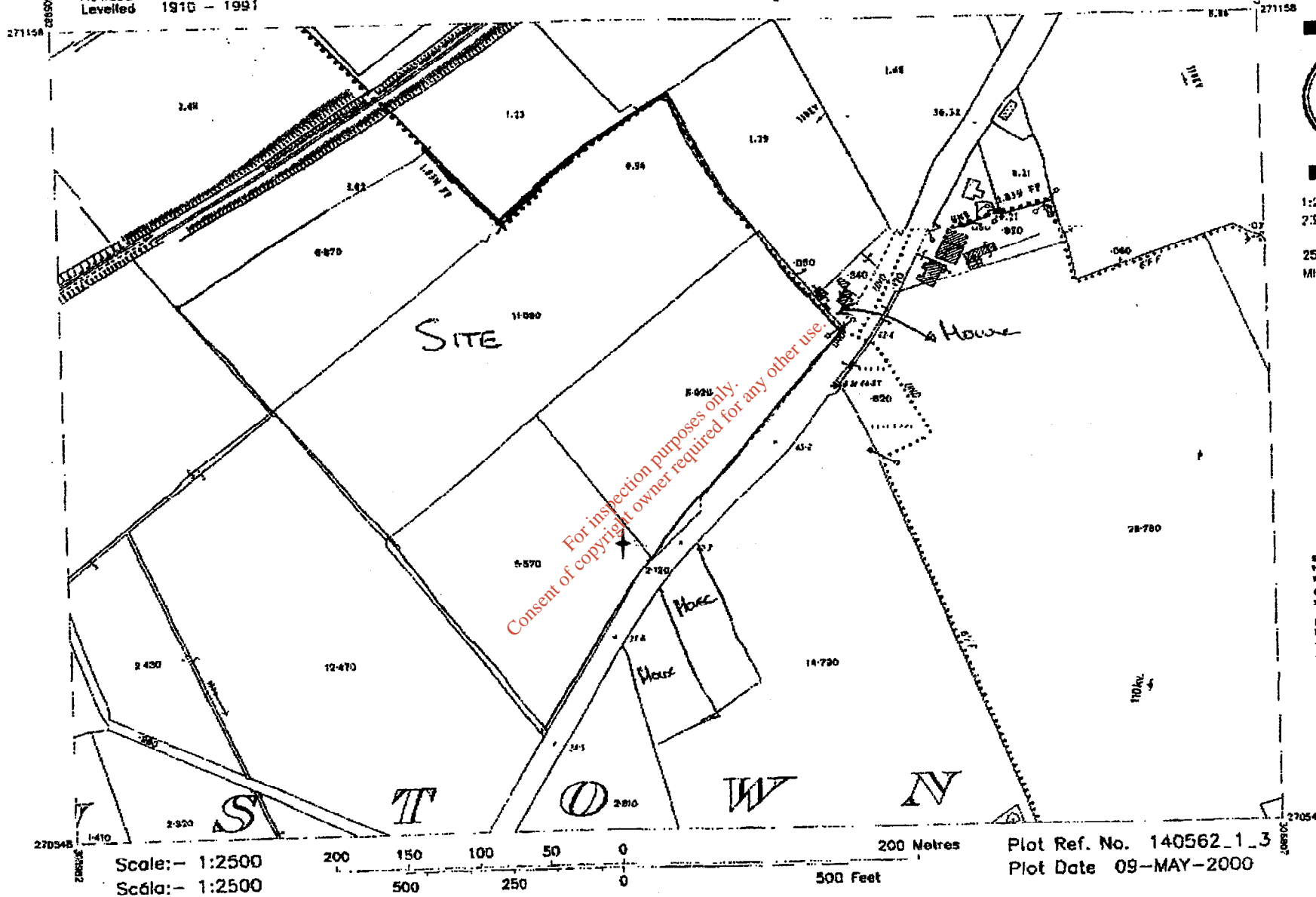
Surveyed 1909 - 1993
 Revised 1974
 Levelled 1910 - 1991



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P.03



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1:2500
 2381-D
 25inch
 MHQ27-D2



Siobhán Ó'Connell
 Ordnance Survey Ireland
 This is a reproduction of the Ordnance Survey map of the area shown. It is not a substitute for the original map. The Ordnance Survey map is the authoritative source of information. The Ordnance Survey map is the authoritative source of information. The Ordnance Survey map is the authoritative source of information.

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Plot Ref. No. 140562_1_3
 Plot Date 09-MAY-2000

† Fig 1. Noise Monitoring Location

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Appendix 1
Tabular and Graphical Results
of
Noise Monitoring on site.

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Consultant Acoustic Engineers

Client: Project Management.

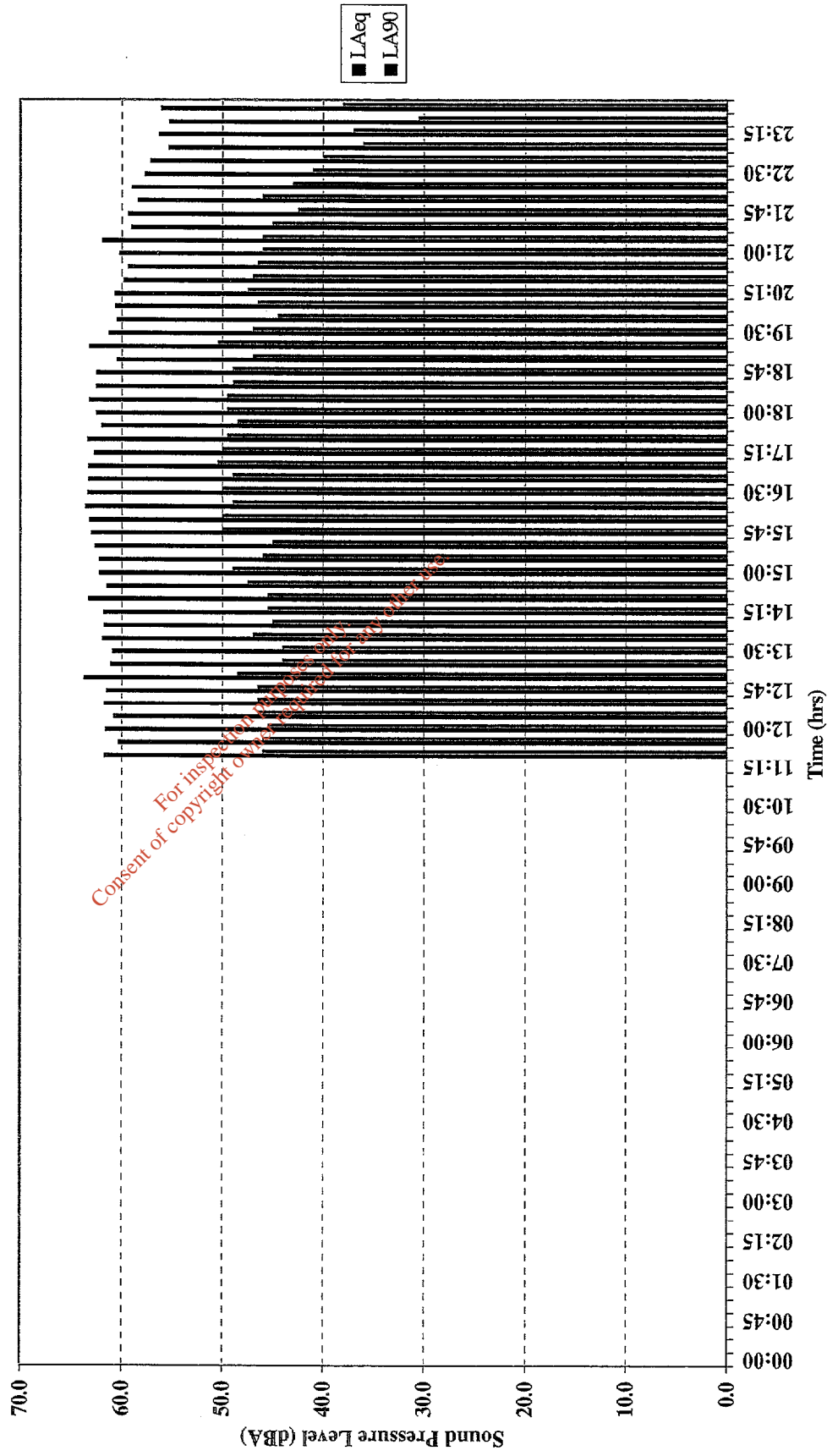
Noise Source: Ambient Noise Levels.

Measurement Location: On site 30 metres from roadway
- R152.

Data File: PRM 254\Data\ July19.xls

Measurement Date: 07th July 2000

Time Histories of $L_{(Aeq, 15 \text{ min})}$ and $L_{(A90, 15 \text{ min})}$ Levels.



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Client: Project Management.

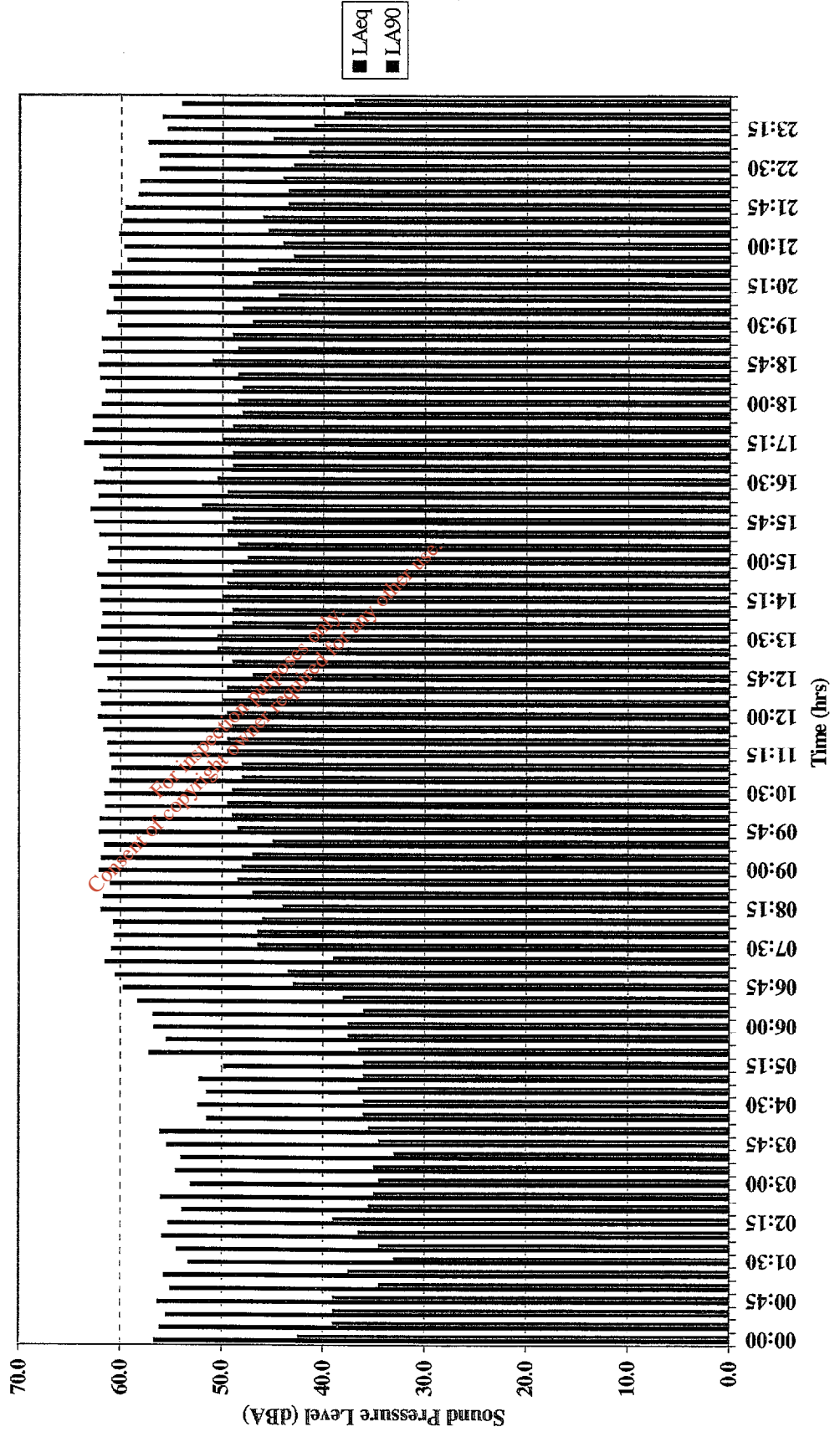
Noise Source: Ambient Noise Levels.

Measurement Location: On site 30 metres from roadway
- R152.

Data File: PRM 254\Data\ July19.xls

Measurement Date: 08th July 2000

Time Histories of $L_{(Aeq,15 \text{ min})}$ and $L_{(A90,15 \text{ min})}$ Levels.

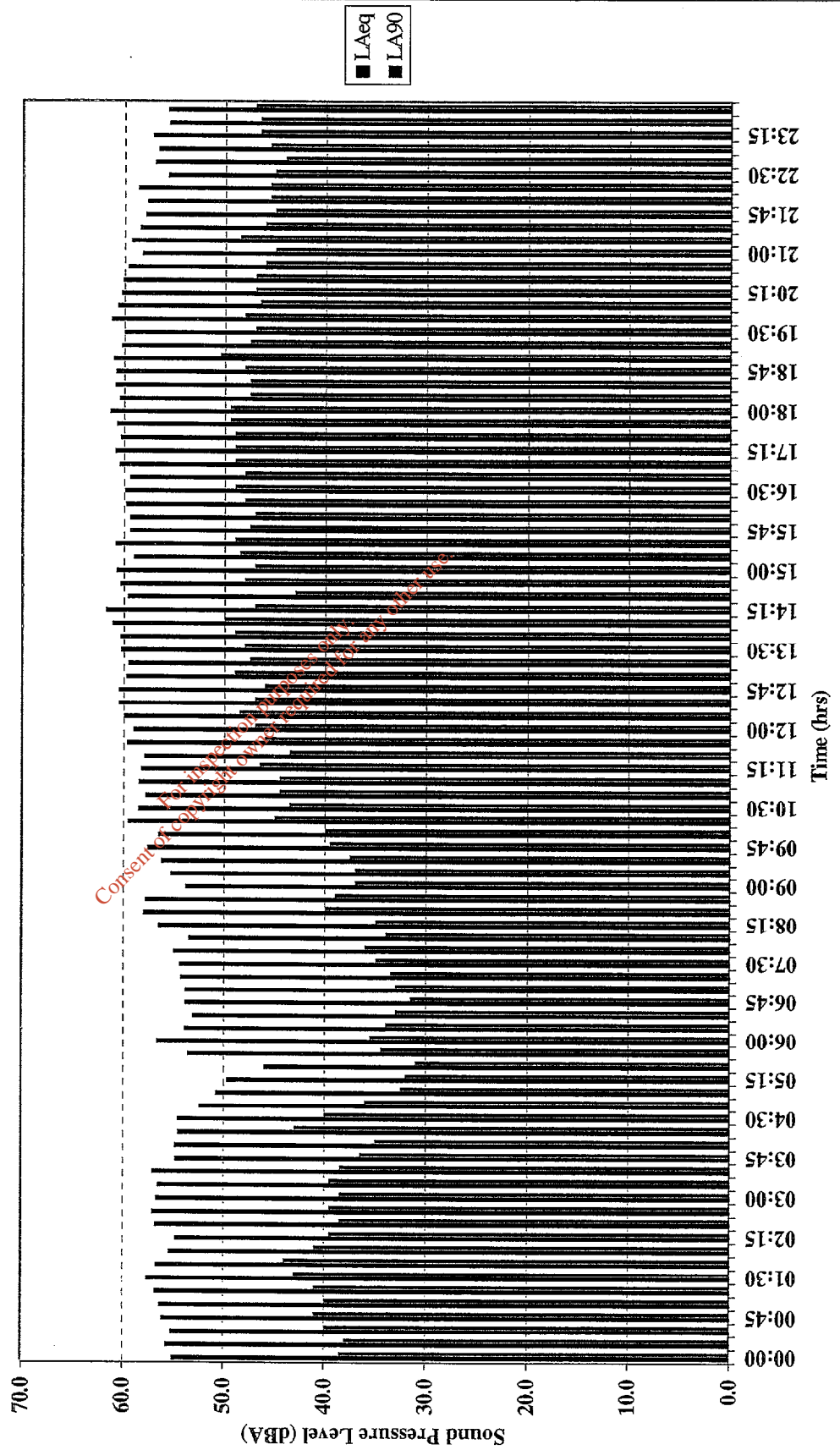


Eanna O' Kelly And Associates
Consultant Acoustic Engineers

Client: Project Management.
Noise Source: Ambient Noise Levels.
Measurement Location: On site 30 metres from roadway
- R152.
Measurement Date: 09th July 2000

Data File: PRM 254\Data\July19.xls

Time Histories of $L_{(Aeq, 15 \text{ min})}$ and $L_{(A90, 15 \text{ min})}$ Levels.

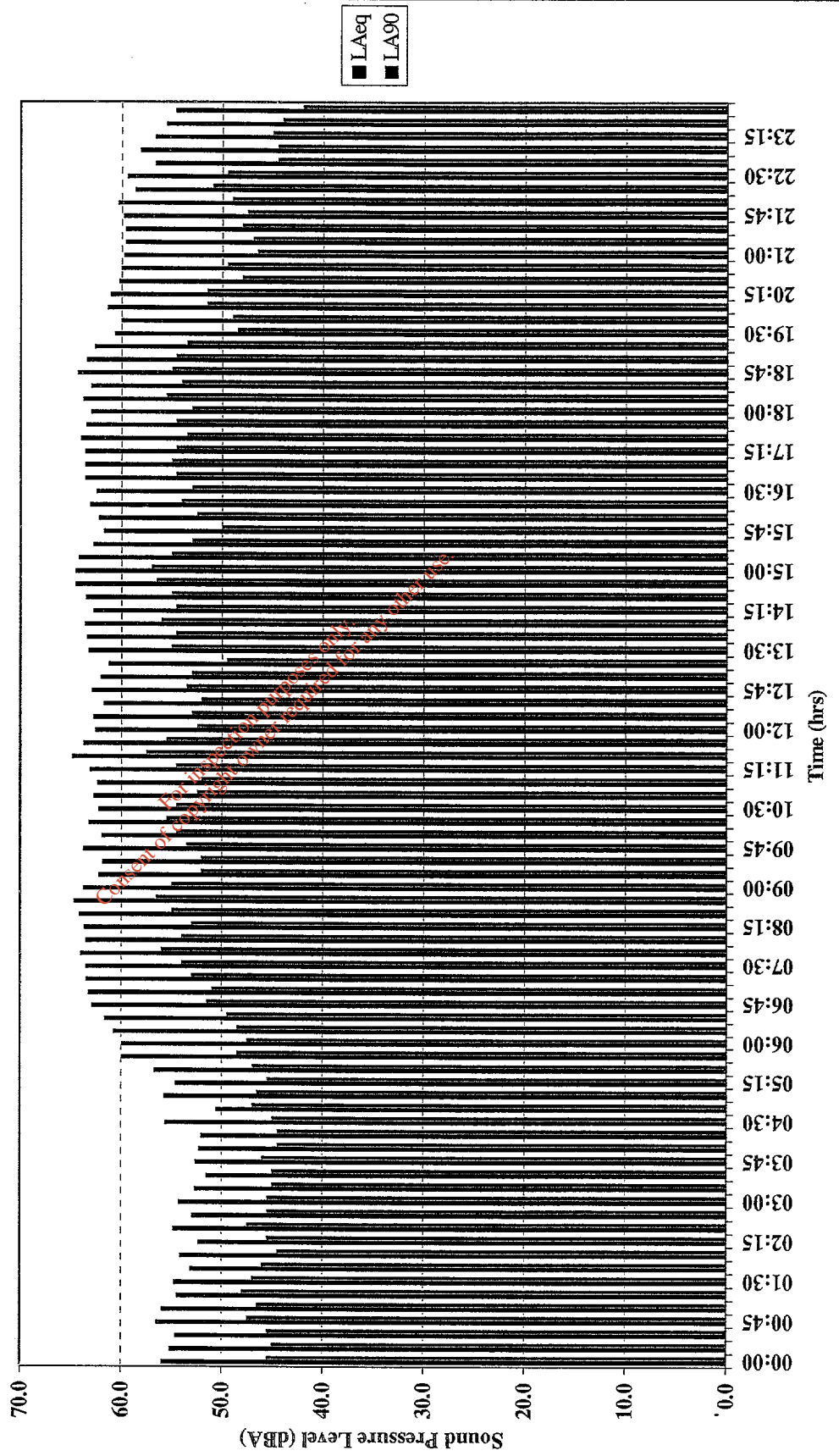


Eanna O' Kelly And Associates
Consultant Acoustic Engineers

Client: Project Management.
Noise Source: Ambient Noise Levels.
Measurement Location: On site 30 metres from roadway
- R152.
Measurement Date: 10th July 2000

Data File: PRM 254\Data\July19.xls

Time Histories of $L_{(Aeq, 15 \text{ min})}$ and $L_{(A90, 15 \text{ min})}$ Levels.

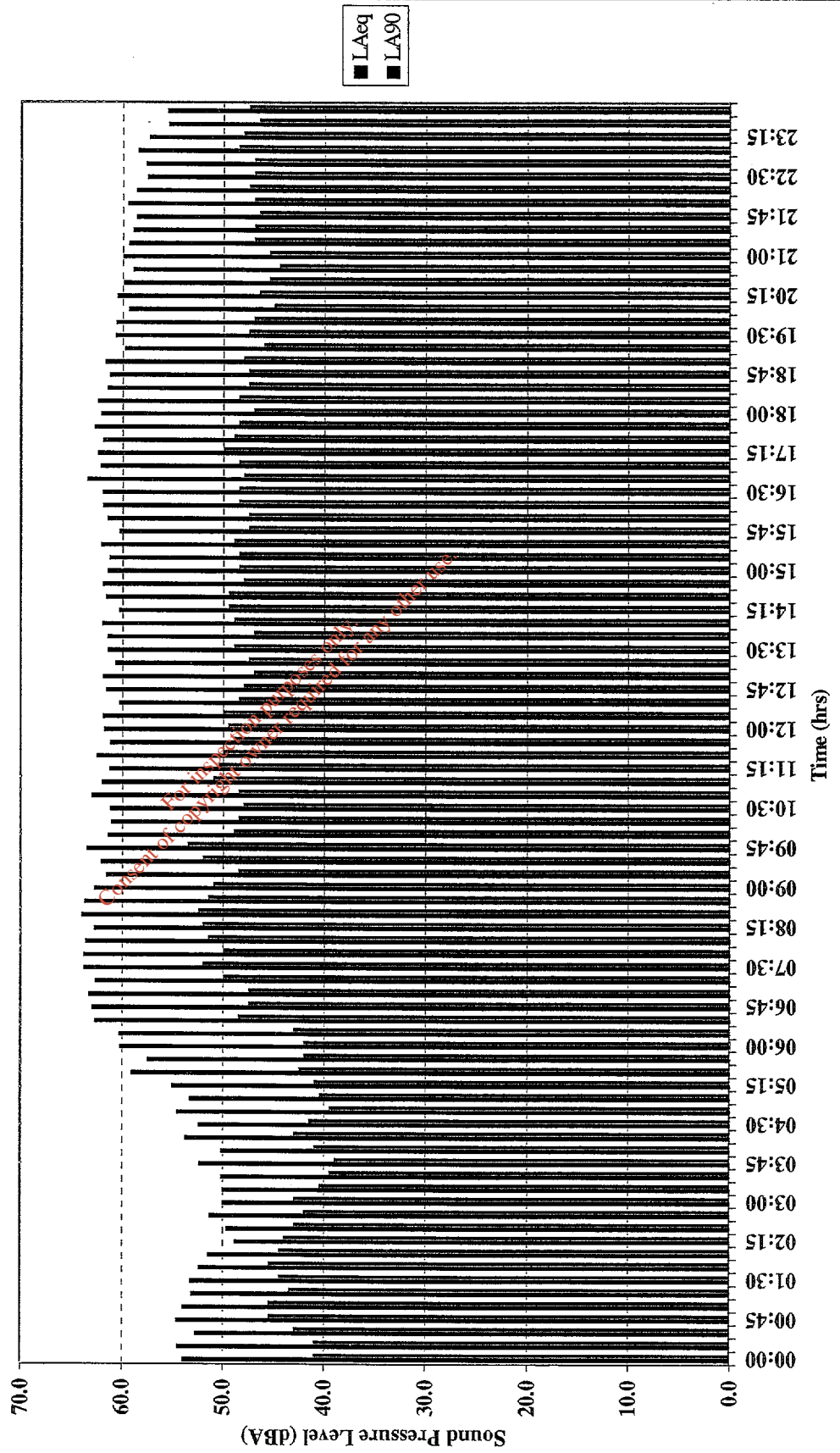


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Client: Project Management.
Noise Source: Ambient Noise Levels.
Measurement Location: On site 30 metres from roadway
- R152.
Measurement Date: 11th July 2000

Data File: PRM 254\Data\ July19.xls

Time Histories of $L_{(Aeq, 15 \text{ min})}$ and $L_{(A90, 15 \text{ min})}$ Levels.

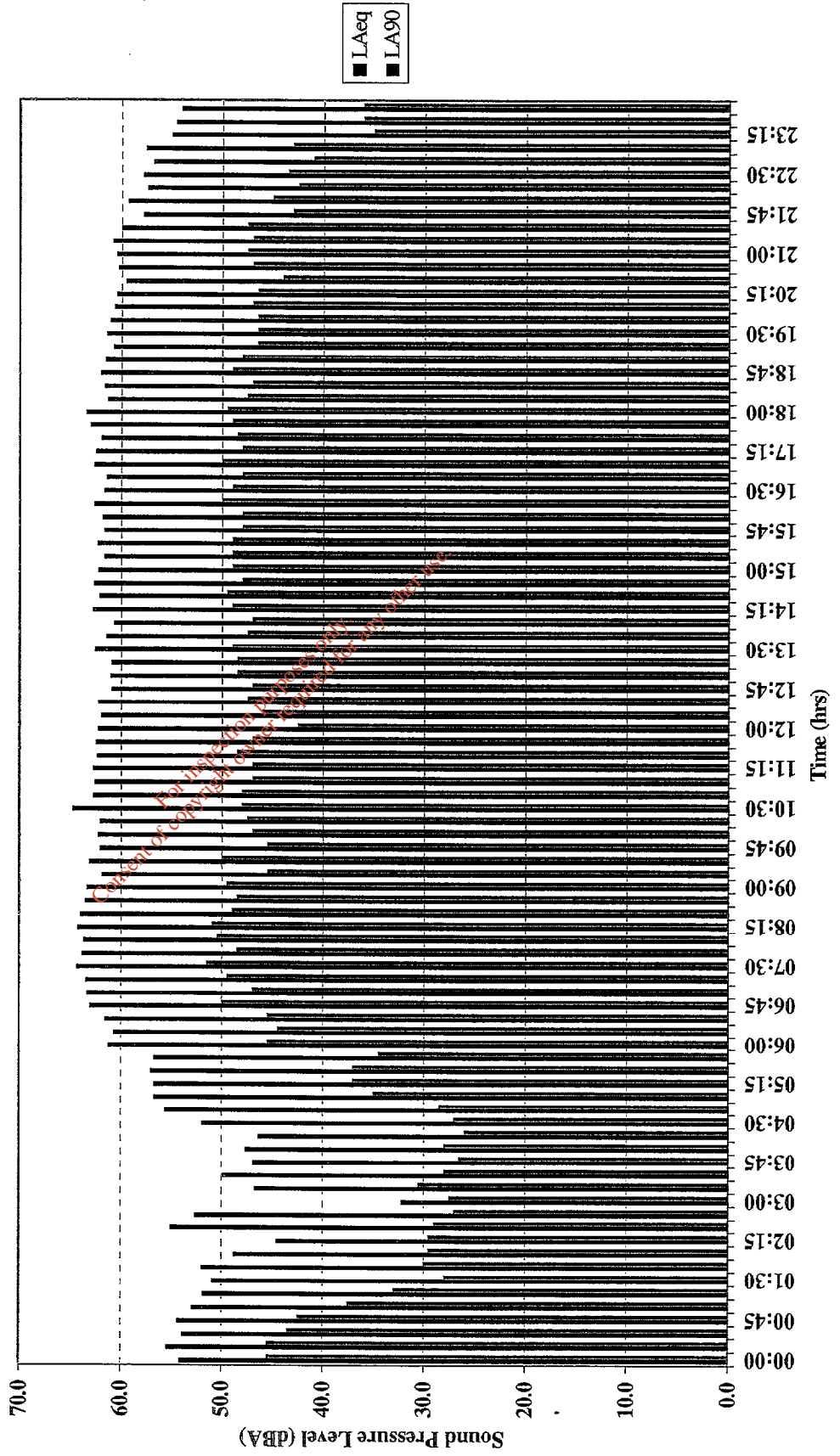


Emma O' Kelly And Associates
Consultant Acoustic Engineers

Client: Project Management.
Noise Source: Ambient Noise Levels.
Measurement Location: On site 30 metres from roadway
- R152.
Measurement Date: 12th July 2000

Data File: PRM 254\Data\ July19.xls

Time Histories of $L_{(Aeq, 15 \text{ min})}$ and $L_{(A90, 15 \text{ min})}$ Levels.



Eanna O' Kelly And Associates
Consultant Acoustic Engineers

Client: Project Management.
Noise Source: Ambient Noise Levels.
Measurement Location: On site 30 metres from roadway
- R152.
Measurement Date: 13th July 2000

Data File: PRM 254\Data\ July19.xls

Time Histories of $L_{(Aeq, 15 \text{ min})}$ and $L_{(A90, 15 \text{ min})}$ Levels.

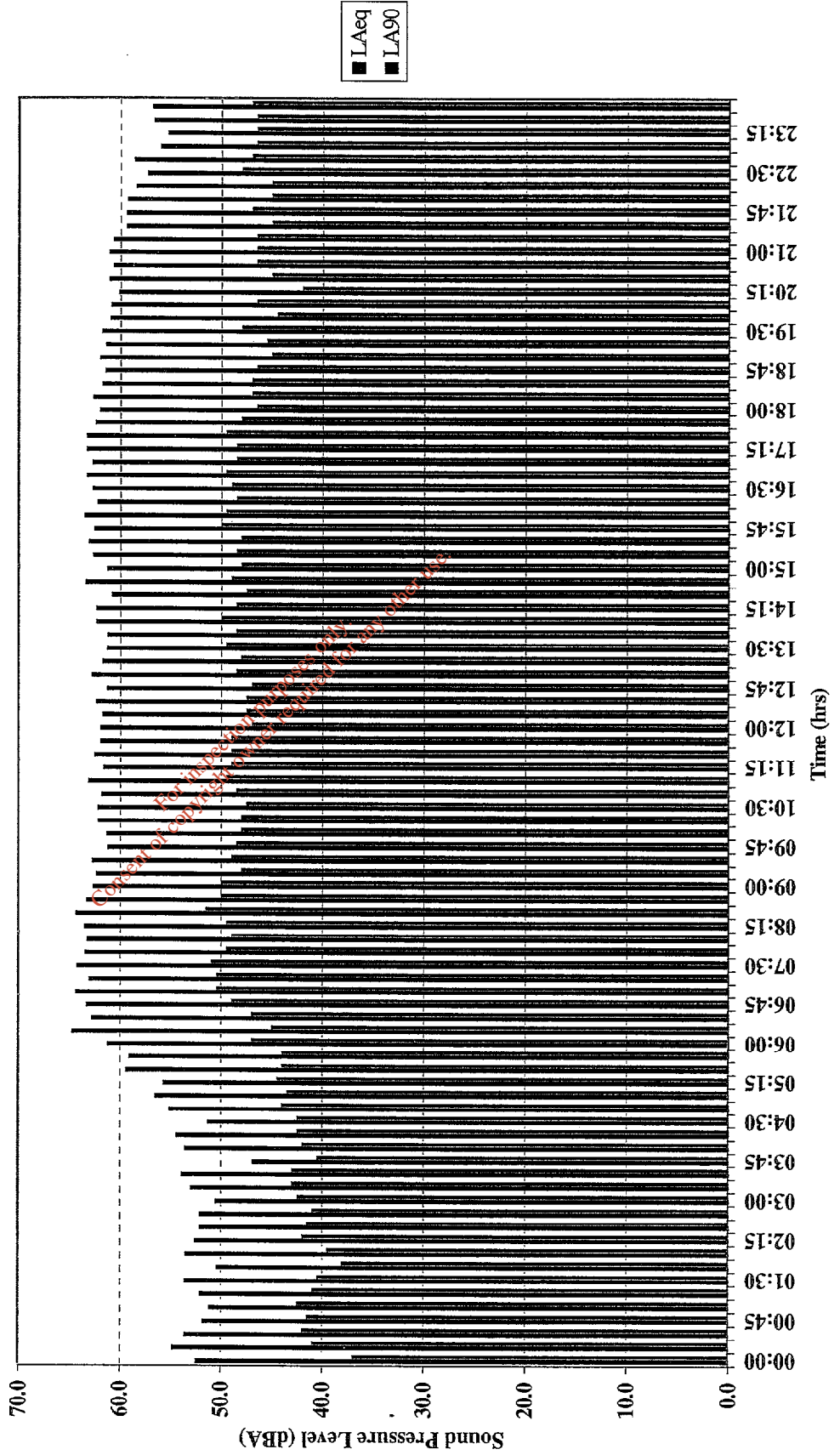


Eanna O' Kelly And Associates
Consultant Acoustic Engineers

Client: Project Management.
Noise Source: Ambient Noise Levels.
Measurement Location: On site 30 metres from roadway
- R152.
Measurement Date: 14th July 2000

Data File: PRM 254\Data\ July19.xls

Time Histories of $L_{(Aeq, 15 \text{ min})}$ and $L_{(A90, 15 \text{ min})}$ Levels.

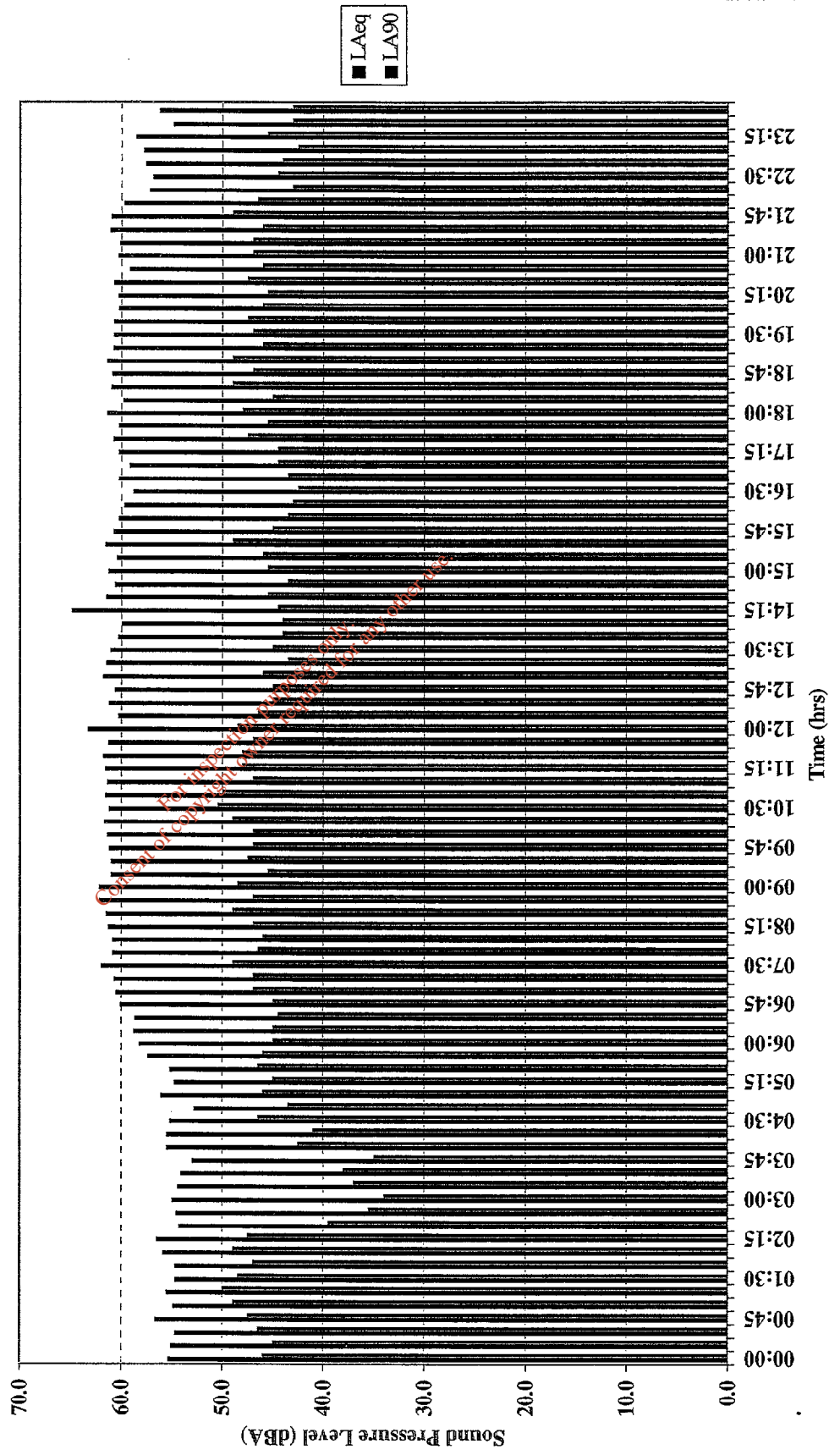


Emma O' Kelly And Associates
Consultant Acoustic Engineers

Client: Project Management.
Noise Source: Ambient Noise Levels.
Measurement Location: On site 30 metres from roadway
- R152.
Measurement Date: 15th July 2000

Data File: PRM 254\Data\ July19.xls

Time Histories of $L_{(Aeq, 15 \text{ min})}$ and $L_{(A90, 15 \text{ min})}$ Levels.

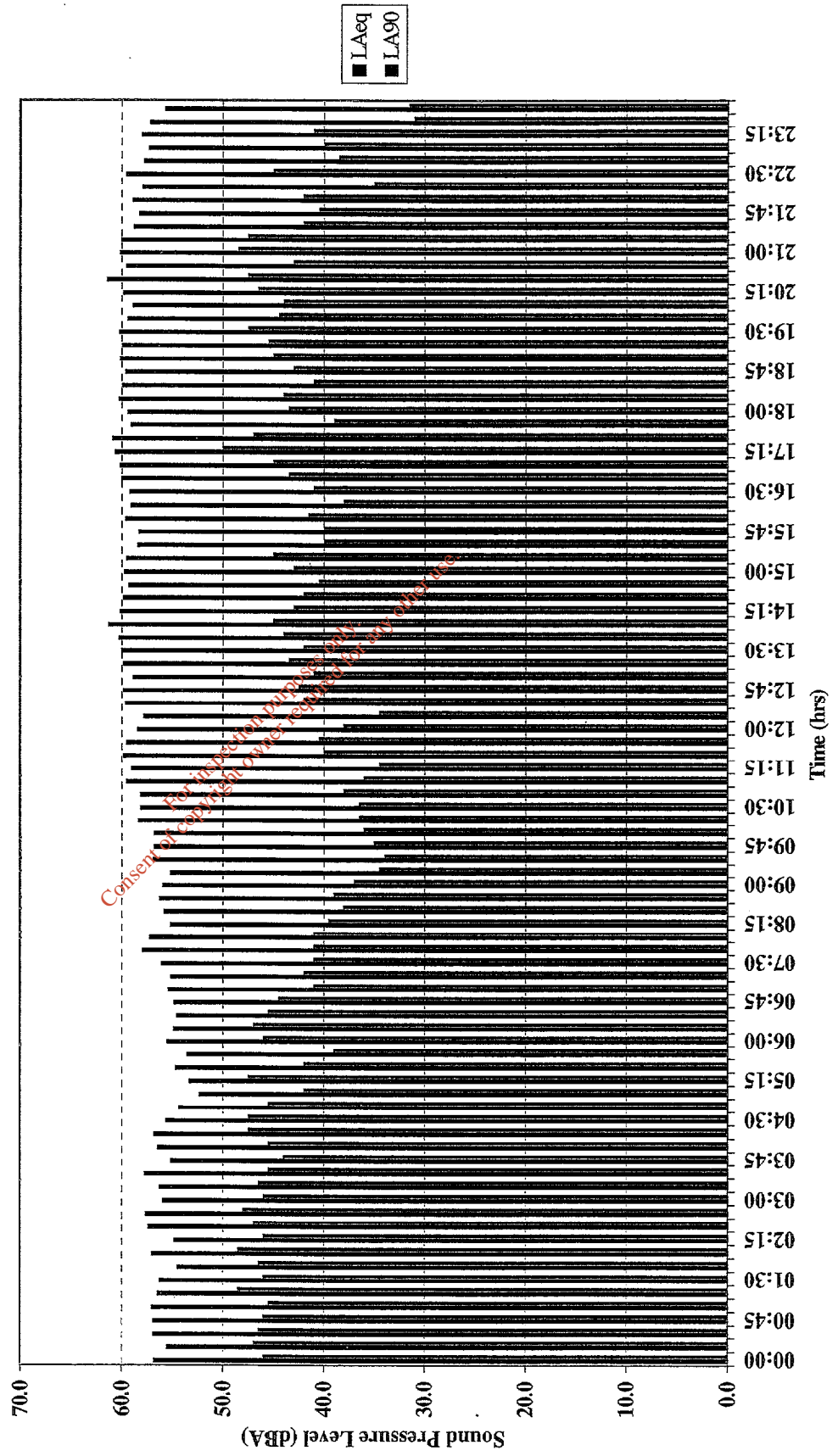


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Client: Project Management.
Noise Source: Ambient Noise Levels.
Measurement Location: On site 30 metres from roadway
- R152.
Measurement Date: 16th July 2000

Data File: PRM 254\Data\July19.xls

Time Histories of $L_{(Aeq, 15 \text{ min})}$ and $L_{(A90, 15 \text{ min})}$ Levels.

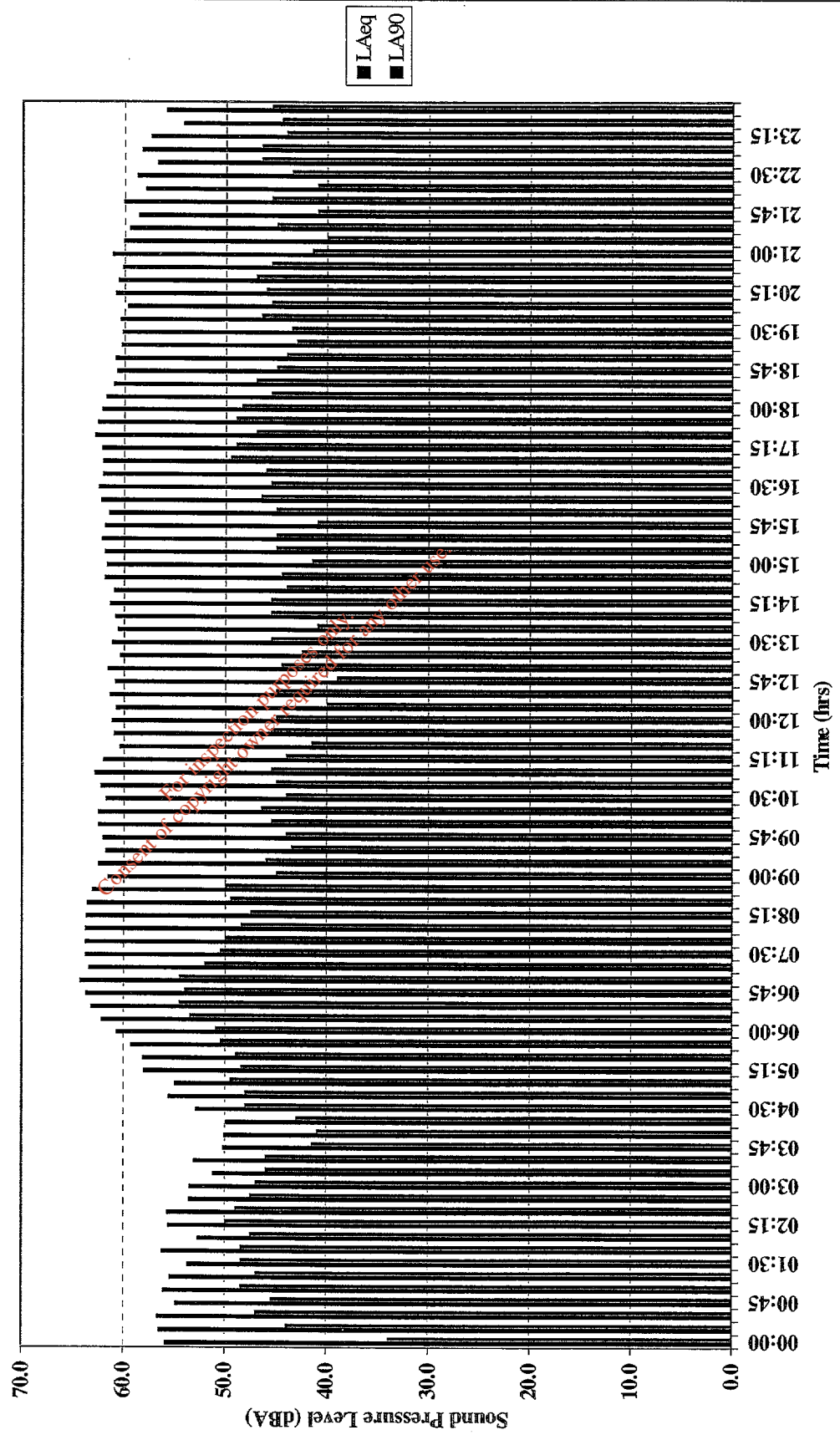


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Client: Project Management.
Noise Source: Ambient Noise Levels.
Measurement Location: On site 30 metres from roadway
- R152.
Measurement Date: 17th July 2000

Data File: PRM 254\Data\ July19.xls

Time Histories of $L_{(Aeq, 15 \text{ min})}$ and $L_{(A90, 15 \text{ min})}$ Levels.



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Client: Project Management.

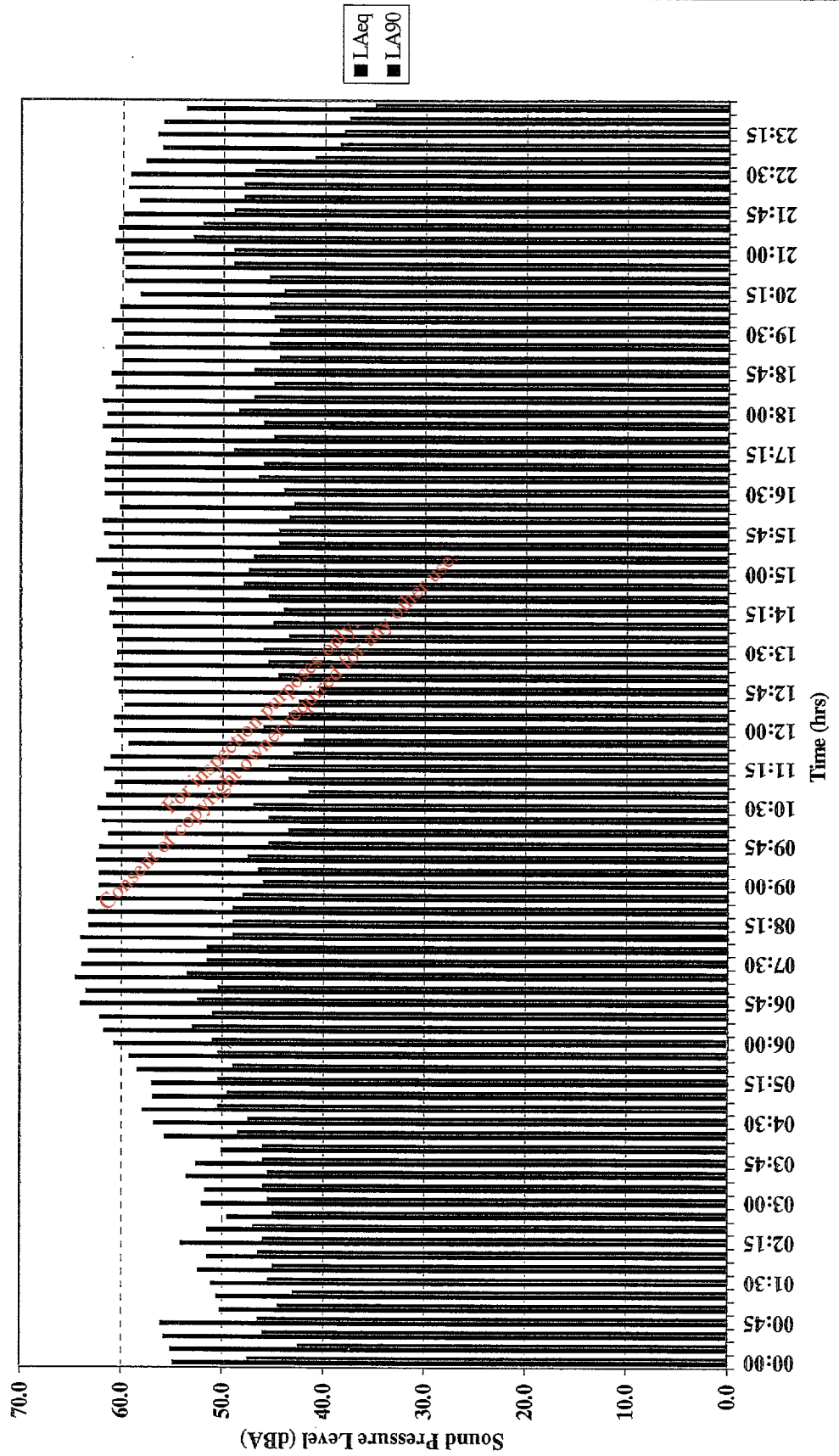
Noise Source: Ambient Noise Levels.

Measurement Location: On site 30 metres from roadway
- R152.

Data File: PRM 254\Data\ July19.xls

Measurement Date: 18th July 2000

Time Histories of $L_{(Aeq, 15 \text{ min})}$ and $L_{(A90, 15 \text{ min})}$ Levels.



Eanna O' Kelly And Associates
Consultant Acoustic Engineers

Client: Project Management.
Noise Source: Ambient Noise Levels.
Measurement Location: On site 30 metres from roadway
- R152.
Measurement Date: 19th July 2000

Data File: PRM 254\Data\July19.xls

Time Histories of $L_{(Aeq, 15 \text{ min})}$ and $L_{(A90, 15 \text{ min})}$ Levels.

