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Acoustic Consultancy Report

Environmental Noise Survey Report and Plant Noise Assessment

Client:	James Dolan Architect 4 Upper Sheridan Road Belvedere Kent DA17 5AP	
Project:	Russell Court Coram Street London	
Our Reference:	ACP-10041	
Revision:	-	
Report Prepared By:	G. Salter M.I.O.A.	
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1.0 Introduction

ACP Ltd were instructed to undertake a plant noise assessment for the proposed two A/C units and Air Handling Unit at Russell Court. The predicted plant noise levels would be compared to the standard noise criteria specified in the London Borough of Camden Replacement Unitary Development Plan, adopted June 2006.

An environmental noise survey has been conducted at Russell Court, at first floor roof level, in order to establish the underlying background and ambient noise levels, during a weekday and weekend period, at the location of the proposed new plant. An extended survey was adopted to cover the full operational period of the proposed plant items.

2.0 Environmental Noise Survey Measurement Procedure

The environmental noise survey procedure and methodology was in accordance with BS4142:1997. This report will be prepared to provide the relevant Local Authority with a full set of ambient and background noise levels for the periods of operation of the new plant, together with a calculation of the proposed plant noise level at the nearest noise sensitive properties.

3.0 Site Layout and Nearest Buildings

The plant under consideration would serve the proposed offices at basement level within Russell Court. The plant would be located on a small flat roof area at first floor level of Russell Court, at the Herbrand Street end of the property. Russell Court consists of residential properties at ground floor and above.

The proposed plant location would be generally surrounded on all sides by a mixture of residential and commercial properties. The plant area would be open at the front, facing onto Coram Street and at the rear facing towards the offices in Herbrand Street. Each side of the plant area is fully enclosed by the end wall of Russell Court and the neighbouring building. It should be noted that the side facades of the properties that adjoin the plant area do not contain windows.

The nearest residential properties with direct line of sight to the plant would be the Witley Court flats in Coram street, directly opposite the site.

Other residential properties would be closer to the proposed plant, but the windows would be fully shielded by the building structure.

To the rear of the plant area, the only property with direct line of sight to the plant would be the offices on Herbrand Street. This office block has sealed non-openable double glazed windows.

Based on our observations on site, and to ensure the worst case situation is considered, we have selected a number of assessment positions as follows.

- Position A This assessment position is at the facade of the flats on the opposite side of Coram Street, which would be the nearest residential properties with direct line of sight to the proposed plant, at a distance of approximately 23m from the nearest unit.
- Position B This is the nearest residential window on the rear facade of Russell Court, at a distance of approximately 2.5m from the nearest plant item. All windows on this facade would be fully shielded from all plant items by the building structure.
- Position C This is the nearest residential window on the front facade of Russell Court, at a distance of approximately 5m from the nearest plant item. All windows on this facade would be fully shielded from all plant items by the building structure.
- Position D This is the commercial office building located directly behind the plant area, at a distance of approximately 11.5m from the nearest plant items. This property would have full line of sight to the proposed plant.

4.0 Plant Details

The proposed plant is detailed below.

Hitachi Inverter Condensing Unit RAS-2.5HVRNE1

This unit would be installed externally on the first floor flat roof area. We have contacted the manufacturers who confirmed the following maximum noise level.

Overall dBA	Octave Band Sound Pressure Level at 1m, dB							
at 1m	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
46	51	53	42	42	43	35	31	24

We have allowed for this unit to operate 24hrs a day, seven days a week.

Hitachi Inverter Condensing Unit RAS-10.0HRNSE

This unit would be installed externally on the first floor flat roof area. We have contacted the manufacturers who confirmed the following maximum noise level.

Overall dBA	Octave Band Sound Pressure Level at 1m, dB							
at 1 m	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
62	66	63	62	61	56	50	44	38

In order to achieve the noise criteria required by the Local Authority, this unit would be controlled by time clock to only operate between 07.00 hrs to 19.00 hrs, Monday to Friday.

VES Supply Air Handling Unit, Model SAM 37

This unit would be installed at basement level, with a fresh air intake duct exiting at first floor flat roof level, adjacent to the two A/C units. This unit has the following induct sound power level.

		Octave	Band Soun	d Power Le	evel, dB		
63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
73	75	68	72	74	73	70	65

This unit would have an atmosphere side attenuator with the following insertion loss.

Octave Band Insertion Loss, dB							
63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
5	8	15	25	32	31	28	22

We have allowed for this unit to operate 24hrs a day, seven days a week.

5.0 Environmental Noise Survey Measuring Position

An unmanned noise survey was undertaken by setting up the noise monitoring equipment in the location of the proposed plant, on the first floor flat roof area of Russell Court. The microphone was placed centrally on the flat roof, at a height of 1.5m above the roof surface.

This measurement position was the most suitable location available and we consider the results obtained to be representative of the true underlying background noise level affecting the nearby noise sensitive properties.

6.0 Noise Measuring Equipment

Extended, unmanned noise readings were obtained using a Svan 949 type 1 real time analyser, serial no 8507, with GRAS 40AE microphone, serial no 102783. This meter carries a current calibration certificate.

The meter was calibrated before and after the survey, with a level of 114dB at 1000Hz, using a Svan SV31 acoustical calibrator, serial no 17644. No adverse deviations were detected.

An environmental protection kit was also used, comprising of a weatherproof windshield/bird-spike, tripod, extension cable and weatherproof meter enclosure.

7.0 Noise Measurement Period

The survey was undertaken from 13:15 hours on Thursday 26th November 2009 to 13:30 hours on Tuesday 1st December 2009.

The weather remained changeable throughout the survey period, with best conditions typically in the evening, night time and morning periods. Weather history charts confirm that several periods of good weather conditions were captured, with light winds and no heavy rain, covering the entire operational period of the proposed plant.

8.0 Noise Level Measurements

Broadband noise levels were recorded and the data shown below is defined as follows:

L _{Aeq,T}	The "A" weighted equivalent continuous noise level
LA90,T	The "A" weighted level exceeded for 90% of sample period
LA10,T	The "A" weighted level exceeded for 10% of sample period
L _{Amax}	The maximum "A" weighted level during the sample period.

A 15minute sampling period was adopted for all readings throughout the survey period.

9.0 Survey Results

The lowest $L_{A90 (15 \text{ min})}$ levels, rounded to the nearest whole numbers, are given below:

Period	Lowest LA90 (15 min)
24hrs	44 dBA
07:00 to 19:00 hrs (excluding weekends)	54 dBA

During our time on site, the existing noise climate appeared to be dominated by traffic noise and general activity in the area, as would be expected in this area of London.

The full set of measured dBA levels are given in Appendix 2.

10.0 Local Authority Noise Criteria

Residential Noise Criteria

Table E of The London Borough of Camden Replacement Unitary Development Plan, adopted June 2006, specifies the following noise criteria for proposed plant and machinery.

"Table E: Noise levels from plant and machinery at which planning permission will not be granted"

Noise description and location of measurement	Period	Time	Noise Level
Noise at 1 meter external to a sensitive facade	Day, evening and night	00:00 - 24:00	5dB(A) < LA90
Noise that has a distinguishable discrete continuous note (whine, hiss, screech, hum) at 1 metre external to a sensitive facade	Day, evening and night	00:00 – 24:00	10dB(A) < LA90
Noise that has distinct impulses (bangs, clicks, clatters, thumps) at 1 metre external to a sensitive facade	Day, evening and night	00:00 - 24:00	10dB(A) < LA90
Noise at 1 metre external to a sensitive facade where LA90>60dB	Day, evening and night	00:00 - 24:00	55dB LAeq

Due to the intermittent operation of the proposed plant, we have taken the worst case criteria of 10 dB below the background noise level at 1m external to a sensitive facade.

Based on the measured background noise levels and the Local Authority noise requirements detailed above, the target noise levels for the proposed plant at the nearest residential facade are therefore as follows

Night time residential criteria	34 dB LAeq,T
Weekday 07:00 to 19:00 residential criteria	44 dB L _{Aeq,T}

Commercial Property Criteria

We have also undertaken an assessment for the offices on Herbrand Street, at the rear of Russell Court.

Internal noise criteria for offices has been taken from guidance given in BS8233:1999. Table 5 in BS8233:1999 gives appropriate indoor ambient noise levels for typical situations. For offices the following is stated:

Critarian	Typical situation	Design range L _{Aeq,T}		
Criterion		Good	Reasonable	
Reasonable conditions	Cellular office	40	50	
for study and work	Staff room	35	45	
requiring concentration	Executive office	35	40	

Assuming a worst case internal noise criteria of 35 dB $L_{Aeq,T}$ for an executive office, and allowing for a typical 33dBA reduction through a closed, non-openable double glazed window (as detailed in BS8233:1999), the following target noise level would apply at the office facade.

Daytime commercial office external criteria 68 dB LAeq,T

11.0 Calculated Plant Noise Level

We have undertaken calculations of the proposed plant noise level at the various assessment positions, based on the manufacturers noise levels. The resultant, unattenuated, combined noise levels are given below, together with the relevant criteria.

The "night / weekend" noise level relates to the operation of the small condensing unit RAS-2.5 and the AHU SAM37 and would be applicable from 19:00 to 07:00 hrs 7 days a week, plus all day Saturday and Sunday.

The "day" noise level relates to all 3 units operating together, and would be applicable between 07:00 to 19:00 hrs, weekdays only.

Assessment Position	Calculated Total Plant Noise Level at Facade, L _{Aeq,T} dB	Criteria L _{Aeq,T} dB
Pos A	Night / weekend 28	34
(facade of Whitley Court flats)	Day 41	44
Pos B	Night / weekend 33	34
(rear facade of Russell Court)	Day 44	44
Pos C	Night / weekend 31	34
(front facade of Russell Court)	Day 42	44
Pos D	Night / weekend 33	N/A
Russell Court)	Day 46	68

The calculations are provided in Appendix 1

12.0 Plant Vibration Isolation

Due to the adjoining residential properties, effective vibration isolation of all plant items is essential. The required vibration isolation treatment is specified below.

2no Condensing Units

The units would be installed on rubber turret type anti vibration mounts, to ensure effective vibration isolation at source.

The associated pipework would be wrapped in soft foam insulation and layed loose in trays on the flat roof. Where pipework enters the building, the penetration would be oversized and backfilled with resilient material. Rigid fixing / contact of the pipework to the building structure would be avoided.

<u>AHU</u>

The unit would be installed at basement level on rubber turret type anti vibration mounts to ensure effective vibration isolation.

The ductwork on either side of the fan would be isolated with minimum 100mm long flexible connections, installed loosely, to ensure vibration transfer through the ducts is avoided.

The ductwork would also be isolated from the building structure within 5m of the AHU.

13.0 Conclusions

As can be seen from sections 10.0 and 11.0 above, allowing for weekday only 07.00 to 19:00 hrs operation of the large condensing unit, the calculated total noise level from all 3no units would achieve the Local Authority noise requirements at all nearby properties.

For the remaining period, the criteria would be achieved with the small condensing unit and AHU operating 24 hours a day, 7 days a week.

Appendix 1 Calculated Plant Noise Levels

Assessment Position A (facade of flats on opposite side of Coram Street)

RAS 10.0	Manufacturers noise level (maximum) Distance correction 1m to 23m Reverberant build up Barrier attenuation Resultant noise level	62 dBA at 1m -27 dB +6 dB none 41 dB L _{Aeq,T}
RAS 2.5	Manufacturers noise level (maximum) Distance correction 1m to 25m Reverberant build up Barrier attenuation Resultant noise level	46 dBA at 1m -28 dB +6 dB none 24 dB L _{Aeq,T}
AHU	Resultant noise level at 25m (obtained by octave band fan noise to atmosp for intake facing Coram Street)	26 dB $L_{Aeq,T}$ here calculation, allowing

Overall combined noise level 19:00 to 07:00 Monday to Friday & all day Saturday and Sunday

RAS 2.5 (24dBA) + AHU (26 dBA) 28 dB L_{Aeq,T}

Overall combined noise level for 07:00 to 19:00 hrs, Monday to Friday

RAS 2.5 (24dBA) + AHU (26 dBA) + RAS10.0 (41 dBA) 41 dB L_{Aeg,T}

Assessment Position B (rear facade of Russell Court)

RAS 10.0	Manufacturers noise level (maximum) Distance correction 1m to 4m Reverberant build up Barrier attenuation (fully shielded) Resultant noise level	62 dBA at 1m -12 dB +6 dB -12 dB 44 dB L _{Aeq,T}				
RAS 2.5	Manufacturers noise level (maximum) Distance correction 1m to 2.5m	46 dBA at 1m -8 dB				
	Reverberant build up Barrier attenuation (fully shielded)	+6 dB -12 dB				
	Resultant noise level	32 dB LAeq,T				
AHU	Resultant noise level at 4m	27 dB LAeg,T				
	(obtained by octave band fan noise to atmosphere calculation, allowing for intake facing Coram Street)					

Overall combined noise level 19:00 to 07:00 Monday to Friday & all day Saturday and Sunday

RAS 2.5 (32dBA) + AHU (27 dBA)

33 dB L_{Aeq,T}

Overall combined noise level for 07:00 to 19:00 hrs, Monday to Friday

RAS 2.5 (32dBA) + AHU (27 dBA) + RAS10.0 (44 dBA) 44 dB L_{Aeg,T}

Assessment Position C (front facade of Russell Court)

RAS 10.0	Manufacturers noise level (maximum)	62 dBA at 1m					
	Distance correction 1m to 5m	-14 dB					
	Reverberant build up	+6 dB					
	Barrier attenuation (fully shielded)	-12 dB					
	Resultant noise level	42 dB LAeq,T					
RAS 2.5	Manufacturers noise level (maximum)	46 dBA at 1m					
	Distance correction 1m to 7.5m	-17 dB					
	Reverberant build up	+6 dB					
	Barrier attenuation (fully shielded)	-12 dB					
	Resultant noise level	23 dB LAeq,T					
AHU	Resultant noise level at 7.5m	27 dB L _{Aea,T}					
	(obtained by octave band fan noise to atmosphere calculation, allowing						
	for intake facing Coram Street)						

Overall combined noise level 19:00 to 07:00 Monday to Friday & all day Saturday and Sunday

31 dB LAeq,T

Overall combined noise level for 07:00 to 19:00 hrs, Monday to Friday

RAS 2.5 (23dBA) + AHU (30 dBA) + RAS10.0 (42 dBA) 42 dB L_{Aeq,T}

Assessment Position D (facade of office building behind Russell Court)

RAS 10.0	Manufacturers noise level (maximum) Distance correction 1m to 13m Reverberant build up Barrier attenuation Resultant noise level	62 dBA at 1m -22 dB +6 dB none 46 dB L _{Aeq,T}
RAS 2.5	Manufacturers noise level (maximum) Distance correction 1m to 11.5m Reverberant build up Barrier attenuation Resultant noise level	46 dBA at 1m -21 dB +6 dB none 31 dB L _{Aeq,T}
AHU	Resultant noise level at 11.5m (obtained by octave band fan noise to atmosp for intake facing Coram Street)	28 dB $L_{Aeq,T}$ here calculation, allowing

Overall combined noise level 19:00 to 07:00 Monday to Friday & all day Saturday and Sunday

RAS 2.5 (31dBA) + AHU (28 dBA)

33 dB LAeq,T

Overall combined noise level for 07:00 to 19:00 hrs, Monday to Friday

RAS 2.5 (31dBA) + AHU (28 dBA) + RAS10.0 (46 dBA) 46 dB L_{Aeq,T}

Appendix 2 Measured Noise Levels

Date	Time			Measured Broadband Sound Pressure Levels, dB			
				LAFMax	LAeg	LA10	LA90
	13:15	-	13:30	67.9	59.4	61.6	56.1
	13:30	-	13:45	77.8	60.9	62.6	55.7
	13:45	-	14:00	71.7	60.4	62.8	56,0
	14:00	-	14:15	72.1	59.9	62.3	55.5
	14:15	-	14:30	78.6	59.9	62.0	55,5
	14:30	-	14:45	68.4	59.3	61.7	55.3
	14:45	-	15:00	79.4	61.4	62.8	55.5
	15:00	-	15:15	73.1	59.5	61.9	55.5
	15:15	-	15:30	68.0	60.1	62.8	55.6
	15:30	-	15:45	68.5	59.2	61.7	55.1
	15:45	-	16:00	78.4	61.0	62.8	55.2
	16:00	-	16:15	72.3	60.8	63.1	56,9
	16:15	-	16:30	73.1	59.5	61.6	55.4
	16:30	-	16:45	71.1	59.2	60.9	56.5
2	16:45	-	17:00	76.1	59.0	60.9	. 56.2
0	17:00	-	17:15	82.8	63.5	62,0	55.7
8	17:15	-	17:30	75.1	59.2	61.2	55.5
12	17:30	-	17:45	72.0	59.5	62.1	54.9
be	17:45	-	18:00	77.6	61.1	62,9	55.8
E	18:00	-	18:15	74.1	59.7	62.0	55.4
NO.	18:15	-	18:30	84.7	63.2	63.4	56.0
ž	18:30	-	18:45	75.2	59.6	62.3	55.3
th	18:45		19:00	81.9	62.0	62.7	55.4
26	19:00	-	19:15	78.5	60.1	61.2	55.0
AP	19:15	-	19:30	93.1	70.5	60.8	55.2
rsd	19:30	-	19:45	79.4	60.7	61.0	55.2
inu	19:45	-	20:00	75.7	58.7	60.6	53.4
H	20:00	-	20:15	74.3	58.2	60.1	54.4
	20:15	-	20:30	69.9	57.9	60.5	53.2
	20:30	-	20:45	76.2	58.1	60.4	52.5
	20:45	-	21:00	79.7	60.0	61.7	53.1
	21:00	-	21:15	68.8	57.4	60.4	51.6
	21:15	-	21:30	68.5	58.2	60.9	53.2
	21:30	-	21:45	82.0	60.9	61.0	52.5
	21:45	-	22:00	72.8	57.7	60.7	52.1
	22:00	- 1	22:15	66.3	57.2	60.0	50.7
	22:15	-	22:30	72.7	57.5	60.0	52.3
	22:30	-	22:45	67.4	57.6	60.8	51 5
	22:45	-	23:00	73.7	577	60.4	50.7
	23:00	-	23.15	67.6	573	60.2	50.7
	23.15		23:30	67.0	57.9	61.1	50.0
	23.30	-	23:45	79.0	57.0	60.7	50.9
	20.00	_	00.00	/0.0	37.0	00.7	50.2

Date	Time		Measured Broadband Sound Pressure Levels, dB				
	00.00	00.15	LAFMax	LAeq	LA10	LA90	
	00:00 -	00:15	68.6	57.6	60,6	50.7	
	00:15 -	00:30	69,3	57.2	60,2	50.2	
	00:30 -	00:45	69.9	56,5	59.8	47.9	
	00:45 -	01:00	68.9	56.4	59.7	48.7	
S.24	01:00 -	01:15	66.1	55.9	59.8	46.8	
	01:15 -	01:30	70.1	56.0	59.7	47.3	
	01:30 -	01:45	86.2	617	60.2	46.6	
	01:45	02:00	67.0	56.0	50.0	40.0	
1000	01.45 -	02.00	67.0	56.0	59.9	46.0	
	02:00 -	02:15	66.2	54.5	58.7	45.5	
1	02:15 -	02:30	76.0	57.1	60,2	46.0	
	02:30 -	02:45	68.7	55.8	60,3	44.9	
	02:45 -	03:00	65.2	54.7	58.8	44.7	
	03:00 -	03:15	64.7	54.9	59.2	44.7	
	03:15 -	03:30	66.9	55.5	59.6	45.4	
	03:30	03.45	CCE	EAA	59.0	44.0	
10.00	02:45	04:00	00,5	54.4	50.0	44.0	
	03.45 -	04.00	65.6	54.2	58.3	44.0	
	04:00 -	04:15	72.9	57.5	60,4	45.3	
- L	04:15 -	04:30	68,3	55,1	59.2	45.9	
	04:30 -	04:45	66,3	55.4	59.4	45.6	
_	04:45 -	05:00	72.9	55.9	59.7	45.3	
•	05:00 -	05:15	66.2	56.0	59.8	46.5	
	05:15 -	05:30	73.0	57.0	60.7	48 3	
	05:30 -	05:45	68.2	56.8	60.6	18.6	
	05:45	06:00	60.5	57.6	61.2	40,0	
1.1	06:00	06:15	63.5	57.0	01.5	49.0	
194	06:00 -	06:15	67.9	58,4	61,7	51,4	
	06:15 -	06:30	77.4	59.7	62.7	50.8	
	06:30 -	06:45	70.0	59,8	62.7	52.6	
	06:45 -	07:00	67.7	59.6	62,6	53,4	
	07:00 -	07:15	78.2	60.2	63.1	54.2	
	07:15 -	07:30	70.9	59.3	61.8	53.9	
1	07:30	07:45	71 4	60.6	62.4	55.2	
1	07:45	08:00	71.4	50.0	63.4	53.2	
	09:00	08:00	70.4	59.9	62.5	54.9	
	08:00 -	08:15	86.6	64.6	63,6	55.3	
	08:15 -	08:30	72.4	60.7	63.2	55,7	
	08:30 -	08:45	74.5	61.5	64.4	56,4	
	08:45 -	09:00	76.2	61.2	63.2	56.5	
	09:00 -	09:15	72.9	60.9	63.6	56.1	
	09:15 -	09:30	78.4	60.4	62.5	56.0	
	09:30 -	09.45	70.4	60.7	62.9	56.0	
1.00	00:45	10:00	70.5	60.2	02,8	50.0	
-	10:00	10.00	80.0	63.0	64.9	57.2	
	10:00 -	10:15	85.3	64.0	65.8	56,7	
	10:15 -	10:30	71.8	60.2	62,6	56.5	
6	10:30 -	10:45	83.1	62.8	63.7	56,5	
00	10:45 -	11:00	88.5	66,6	62.7	56,4	
20	11:00 -	11:15	70.0	59.8	62.5	55.3	
Der	11:15 -	11:30	73.8	60.8	63.2	55.6	
F	11.30 -	11:45	70.0	61.6	CA 1	EE O	
ve	11:45 -	12:00	72.2	50.2	61.7	55.5	
o	12:00	12:15	72.5	59.5	61.7	55.4	
2	12.00 -	12.15	76.5	61.3	63,9	56,1	
7t	12:15 -	12:30	78.8	61,9	64.3	56,3	
5	12:30 -	12:45	74.6	60.9	63.3	55.8	
(e)	12:45 -	13:00	76.7	60.4	62.4	56.2	
rio	13:00 -	13:15	73.0	60.0	61.8	56.2	
u.	13:15 -	13:30	73.9	61.0	63.3	57.3	
	13:30 -	13:45	78.5	60.2	62.4	55.9	
	13:45 -	14:00	70.4	59.7	62.3	55.7	
	14:00	14:15	70,4	59.7	02,5	55.7	
	14.15	14:20	00.9	59.4	61.9	55.1	
	14:15 -	14:30	/3.4	60.1	62.7	55.1	
	14:30 -	14:45	86,3	63.0	62,6	55.3	
	14:45 -	15:00	73.2	59,7	62.2	55.5	
	15:00 -	15:15	83.1	61.1	62,5	56.1	
	15:15 -	15:30	72.8	60.2	62.5	55.8	
	15:30 -	15:45	70.7	60.4	62.8	56.6	
	15:45	16:00	81.1	62.4	62.0	5E 1	
	16:00	16.15	74 5	60.7	62.5	55.1	
	16:15	16:20	14.5	60.2	62.1	55.7	
	16.15 -	16:30	87.4	66,0	62,2	55.6	
	10.30 -	10:45	79.0	61.1	62.4	55.4	
	10:45 -	17:00	73.4	59.0	61.4	55.2	
	17:00 -	17:15	75.8	60.0	62.2	55.3	
	17:15 -	17:30	96.2	72,9	63,0	54,9	
	17:30 -	17:45	75.6	59.5	61.7	55.0	
	17:45 -	18:00	86.3	63.9	62.3	54.1	
	18:00 -	18:15	70.7	59.8	62.4	55 3	
	18:15 -	18:30	72.1	60.4	62.9	55.2	
	18.30	18:45	70.5	50.2	61.0	55,5	
	18.45	10.00	70.5	55.2	61.9	55.1	
	10.45	10.15	14.2	59.2	61.8	54.6	
	10:15	19:15	94,3	/0,1	63,8	54.7	
8	19:15 -	19:30	69,8	58,9	61.7	53.6	
	19:30 -	19:45	76,8	60,0	62,2	54.1	
1.1	19:45 -	20:00	71.2	59.0	61.7	53,7	
	20:00 -	20:15	69,4	58,4	60,9	53.7	
	20:15 -	20:30	68.8	58.4	61.0	53.3	
	20:30 -	20:45	71 7	58.7	61.2	53.0	
	20:45 -	21:00	71 5	59.7	61.0	E2.4	
	21:00	21.15	11.5 CC E	50.2	61.0	52,4	
	21.00 -	21.13	00.5	58.3	61.0	53.5	
		21:30	/1.1	58.3	60,8	53,1	
	21:30 -	21:45	73.3	58,9	60,8	52,5	
	21:45 -	22:00	69.1	58,4	61.1	52.2	
	22:00 -	22:15	71.4	57.5	60.1	52.2	
	22:15 -	22:30	88.9	66.0	63.3	53.0	
	22:30 -	22:45	70.6	58.2	61.2	52.5	
	22:45 -	23:00	64.4	57.2	60.2	52.0	
	23:00 -	23:15	78.9	58.6	60.7	51.6	
	23:15	23.30	75.5	50.0	61.0	52.0	
	23.20	22:45	75.0	59.0	61.0	53.3	
		43,43	76.2	58.0	60,6	51.7	
	22:45	00.00	66.0		66.5		

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			Measured Broadband Sound Pressure Levels, dB				
Date	Time		LAFMax	LAeq	LA10	LA90	
	00:00 - 0	00:15	75,3	58.6	60.6	52.1	
)	00:15 - 0	00:30	94.3	68,8	61.4	52,1	
	00:30 ~ (00:45	69,7	57,5	60.6	50,6	
- (00:45 - (01:00	70.3		60,9	49,9	
	01:00 - 0	01:15	70.6	57.6	61.1	50.3	
1	01:15 - 0	01:30	65,8	57,7	60.7	50.8	
	01:30 - 0	02:45	80.8	60.5	61.0	49.3	
- (02:00	02.00	64.0		60.1	48.5	
	02:00 - 0	02.10	04,8	56.6	59.9	47.5	
1	02:30	02:45	65.8	571	60.0	47.3	
1	02:45 . (03:00	65.8	57.6	61 3	<u>47.7</u>	
	03:00 - 0	03:15	661	57.2	60.7	50.7	
	03:15 - (03:30	70.9	57.2	61.0	48.4	
1	03:30 - 0	03:45	73.9	58.2	61.4	47.7	
1	03:45 - 0	04:00	66,2	56,4	60,4	47.7	
	04:00 - (04:15	69.9	56,9	60,7	48,3	
	04:15 - (04:30	68.4	56,5	60.1	48.4	
1	04:30 - 0	04:45	67.6	56.5	60,5	47.0	
1	04:45 0	05:00	66,1	56.0	59.9	47.9	
-	05:00 - 0	05:15	72.8	57.0	60,7	47.0	
	05:15 . 0	05:30	81.1	59.4	60.7	48,6	
	05:45	06-00			60.5	47,9	
1	0600 . (06.15	<u> </u>	57.1	60.6	48.0	
1	06:15	06:30	66.7	574	61 7	<u> </u>	
1	06:30 - 0	06:45	65.9	57 2	60.7	<u>43,3</u> <u>40</u> 1	
1	06:45 - 0	07:00	74.3	58.1	61.4	50.0	
1	07:00 - 0	07:15	67.9	58.4	61.9	49.8	
ļ	07:15 - 0	07:30	87.2	64.1	61.6	50.6	
1	07:30 - 0	07:45	76.9	59.2	61.8	51.3	
1	07:45 - (08:00	85.6	62.7	61.8	51,3	
1	08:00 - 0	08:15	76,6	60.2	62,5	52.5	
1	08:15 0	08:30	69.1	58.0	60.8	52,4	
1	08:30 - (08:45	84,3	63.0	61.5	52.2	
}	08:45 - 0	09:00	68,8	<u> </u>	<u>61.2</u>	52.8	
•	09:00 - 0	09:15	76,3	59.7	62.4	54.0	
	09:15 - 0	09:30	71.4	59,1	<u>61.7</u>	54.2	
1	09:30 - 0	10:00	71.0	59.7	62.3	54.4	
}	10:00	10.00		59.2	624	54.0	
	10:15	10:30	74.3	59.1	62.2	54.0	
6	10:30	10:45	771	59.5	62.6	52.8	
l ă	10:45 -	11:00	93.1	64.8	62.0	53.5	
	11:00 -	11:15	71.0	59.2	62.0	54.1	
- Ē	11:15 - :	11:30	72.1	58.9	61.2	54.0	
(lě	11:30 - 1	11:45	73.2	58.9	61.4	53.6	
Î	11:45 - 1	12:00	70.7	59.2	62.2	52.9	
Ē	12:00	12:15	82.8	59,5	61.9	53.9	
58	12:15 - 1	12:30	70,3	59.0	61,8	53.2	
چ	12:30	12:45	78,1	58,6	61.2	52,5	
P P	12:45	13:00	81.8	61.9	61.9	54.5	
at	13:00	13:15	88.2	66.7	62,3	53.4	
l v	13:15 -	12.45		59.1	61.8	<u></u>	
1	13:45	14:00	72 7	59.1	611		
	14:00	14:15	75 7	59.8	62.1	53.9	
	14:15	14:30	77 2	58.9	61.7	54.1	
1	14:30	14:45	75.6	59.3	61.4	531	
1	14:45 - 1	15:00	67.8	57.6	60.0	52.5	
}	15:00	15:15	74,2	58,9	61.6	52.9	
1	15:15 - :	15:30	72,2	59.4	61.6	53.6	
1	15:30	15:45	69.6	58.3	61.1	53.0	
1	15:45	16:00	81.2	59,9	60.4	52.5	
}	16:00	16:15	69,5	57.7	60,5	52.0	
1	16:15	16:30	68.7	57.0	59.7	52.5	
1	16:50	17:00	71.9	57.7	60.5	51.6	
1	17:00	17:15	<u> </u>		60.3	52.7	
}	17:15	17:30	<u> </u>		60.2	52.3	
1	17:30	17:45	77.6	58 5	60.3	57 5	
1	17:45	18:00	86.2	63.0	61.0	<u> </u>	
ł	18:00 -	18:15	79.6	59.5	61.3	53.6	
1	18:15 -	18:30	71.2	58.2	60.8	53.3	
1	18:30 - 1	18:45	79.9	60.9	59.9	54.4	
1	18:45 -	19:00	91.4	68,5	65.3	54.6	
1	19:00 - 1	19:15	79.2	60,8	62.8	53,9	
1	19:15 - 1	19:30	74.6	57.3	59,3	53,4	
1	19:30	19:45	68.8	58,2	60.6	54.3	
1	19:45 -	20:00	70.6	58.7	60.7	54.1	
J	20:00 - 2	20:15	74.0	58,2	60,0	55,1	
1	20:15 - 2	20:30	69.9	59,1	61,4	55,4	
1	20:30 -	20:45	70,3	58.2	60.7	54.1	
1	21:00	21:00	67.8	57.8	60.3	54,0	
1	21.15	21-20	/6./	58.8	60,7	53,8	
1	21:30	21.45	- 70,0	59.1	60.0	53.1	
1	21.45	22:00	71 2	59.1	60.0	53.8	
1	22:00 -	22:15	67.6	572	60.9	53,4	
{	22:15 - 2	22:30	73.9	579	50.9	52.0	
1	22:30 - 2	22:45	66.5	57.9	60.8	52.8	
1	22:45	23:00	69.1	57.7	60.4	52 7	
1	23:00 - 2	23:15	79.3	58.9	59.9	52.4	
[23:15 - 2	23:30	68.4	57.6	60.5	52.1	
1	23:30	23:45	68.8	58.1	61.0	53,3	
	23:45 (00:00	69.8	59.5	62.2	54.3	

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Date	Time	Measured Broadband Sound Pressure Levels, dB				
	00:00 00:15	LAFMax	LAeg	LA10	LA90	
1	00:00 - 00:15	69.4	58,4	61.2	53,6	
	00:30 - 00:45	<u> </u>	59.1	61.6	53.8	
	00:45 - 01:00	65.2	58.6	61.2	54.0	
1	01:00 - 01:15	74,4	59,5	62.1	54.7	
1	01:15 - 01:30	64,8	58.2	61.2	52.9	
í	01:30 - 01:45	66.7	57,9	60,9	50,5	
	01:45 - 02:00	67.1	57,3	60,5	50.6	
	02:15 - 02:30	6/9	569	61.1	49.7	
	02:30 - 02:45	66.5	57.9	61.2	50.2	
1	02:45 - 03:00	67,5	57.3	60.6	48.9	
1	03:00 - 03:15	68,0	57.0	60,4	50.2	
	03:15 - 03:30	84.2	61,2	61.4	49.4	
	03:30 - 03:45		60,5	61.5	48,6	
	04:00 04:15	67.9	571	<u>29.8</u>	47.9	
1	04:15 - 04:30	65.7	56.8	61.0	47.9	
1	04:30 - 04:45	65.6	55,5	59,5	47.2	
	04:45 - 05:00	68.0	55.5	59,9	45.6	
Į	05:00 - 05:15	66,2	55.6	59,9	45,8	
	05:30 05:45	65,9	55,8	<u> </u>	46.9	
1	05:45 - 06:00	65.3	55.5	59.6	47.0	
1	06:00 - 06:15	74.7	57.4	60.5	48.4	
1	06:15 - 06:30	64,6	56,3	59,8	48,4	
	06:30 - 06:45	73,5	56.9	60,2	49.3	
1	06:45 07:00	68,4	56.2	59.7	48,7	
1	07:15 - 07:15	63,4	57.0	59.7	48,9	
1	07:30 07:45	67.7	57.0	60.0	50.4	
1	07:45 08:00	74.2	59.0	62.0	50.8	
1	08:00 08:15	90.2	65.1	61.6	51.9	
]	08:15 08:30	74,2	57.5	61.0	49,9	
1	08:30 08:45	69,6	58,1	60.9	51.8	
1	09:00 09:00	72.4	58.5	61.5	51.6	
	09:00 - 09:13	77.9	50.8	62.4	52.2	
	09:30 - 09:45	75.5	58.7	61.3	52.1	
1	09:45 - 10:00	67.0	57.8	60.6	53.0	
1	10:00 - 10:15	70,2	58.7	61.1	54,2	
1	10:15 - 10:30	66.5	58,3	61.0	52,7	
8	10:30 - 10:45	80.0	61.0	62,7	53.2	
2	10:45 - 11:00	/0.5	58.2	61.0	53./	
per l	11:15 - 11:30	69.6	58.4	61.4	52.5	
E B	11:30 - 11:45	65.0	57.4	59.9	53.1	
l ≥	11:45 - 12:00	75,7	59.1	61.4	54.0	
z ç	12:00 - 12:15	71.5	59.0	61,6	54.3	
1 Å	12:15 - 12:30	71,4	59.1	61.5	54.5	
A.	12:50 - 12:45	76.2	59,1	61.7	54.2	
P P	13:00 - 13:15	67.7	57.7	60.1	53.7	
, s	13:15 - 13:30	81.6	62.9	62,5	55.0	
	13:30 - 13:45	82.1	61.0	61.3	54,3	
1	13:45 - 14:00	72.2	59.4	61.5	55,9	
1	14:00 - 14:15	69.0	58,9	61,3	55.4	
	14.10 - 14.30	72.0		63.7	54.0	
	14:45 - 15:00	78.3	59.5	60.2	54.2	
	15:00 - 15:15	69.6	58.0	60,6	53.8	
1	15:15 15:30	71,9	58.8	61,2	53.7	
1	15:30 - 15:45	68.9	58.0	60.5	54.3	
1	15:45 - 16:00	77.9	60,1	61.1	55.2	
1	16:15 - 16:15	73.9	59.0	61.0	54.1	
1	16:30 - 16:45	75.2	58.6	60.5	54.7	
1	16:45 - 17:00	66.0	58,1	60,4	54.8	
1	17:00 - 17:15	66.0	56.8	58.9	54.0	
1	17:15 - 17:30	77.8	59.0	60.9	54.0	
1	17:45	72.2	57.5	59.8	53.6	
1	18:00 - 18:15	<u>87</u> 7		<u>8,6C</u> 8 18	53.2	
1	18:15 - 18:30	68.5	58.2	60.7	54.3	
}	18:30 - 18:45	82.2	61.1	59.3	53.1	
1	18:45 - 19:00	68,9	57.4	59.7	53.8	
1	19:00 - 19:15	95,4	73.1	62.0	55.2	
1	19:15 - 19:30	84.3	61,9	61.1	54.2	
1	19:45 - 20:00		<u></u>	<u></u>	510	
{	20:00 20:15	69.6	58.1	60.9	53.7	
1	20:15 - 20:30	67.0	57.1	59.6	53.0	
1	20:30 - 20:45	71.4	57.9	60,1	52.6	
}	20:45 - 21:00	82.7	64.2	63,1	53,2	
1	21:00 - 21:15	89,6	66.3	61.7	51.1	
l	21:15 - 21:30	72.9	57.3	59.9	51.8	
1	21:45 22:00	68.4	57.0	59.9	51.0	
1	22:00 - 22:15	80.5	60.2	60.9	51.0	
1	22:15 - 22:30	76.2	58.3	60,2	51.0	
1	22:30 - 22:45	69.3	57.1	59.9	50,5	
1	22:45 23:00	79.7	60.0	60.7	50.0	
1	23:15 - 23:15	66,2	56.8	59.7	51./	
1	23:30 - 23:45	66.9	<u>- 20.3</u> 56.7	60.2	45.2	
	23:45 00:00	73.7	57,7	60.4	50.7	

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00:00 - 00:15 77,00 58,0 61,0 47 00:15 00:30 00:45 72,6 58,6 59,9 46 00:30 00:45 72,6 58,6 59,9 46 00:30 01:37 64,4 55,0 99,4 47 00:30 01:37 64,4 55,0 99,4 47 01:45 01:37 64,6 55,3 99,5 47 01:45 01:30 65,6 54,4 58,4 58,4 48 01:45 01:30 65,6 54,4 58,4 59,1 44 01:30 01:31 61:30 55,1 51,2 51,3 44 01:31 01:30 66,1 55,1 65,1 60,1 44 01:30 01:31 61,3 56,1 60,0 47 01:31 01:32 61,3 56,1 60,0 47 01:30 01:31 62,0 55,1		00:00 00:15 00:30 00:45	- 00:15 - 00:30 - 00:45	77.0 76.6	58.0 58.5	61.0 61.4	47.8 49.5
00:15 - 00:30 76.6 58.5 61.4		00:15 00:30 00:45	- 00:30	76,6	58,5	61.4	49,5
00:30 - 00:45 72.6 56.6 99.9 46 00:45 01:00 66.3 56.1 59.9 46 01:30 01:35 64.4 56.0 59.4 47 01:45 06.5 55.3 59.4 47 01:46 02.0 55.6 55.3 59.4 47 01:45 02.0 55.6 55.4 84.4 84.4 02:00 02:37 65.6 54.4 84.4 46 02:45 02:30 65.8 55.2 57.5 44 03:15 03:30 65.8 55.2 57.5 44 04:30 81.6 57.7 59.6 44 04:30 81.6 57.7 59.6 44 04:30 81.6 57.7 59.6 44 04:45 05:30 66.2 56.1 60.0 47 06:45 06:30 71.4 52.7 61.6 49		00:30 00:45	- 00:45		the second s		
00:45 01:00 66:3 56:1 99.9 49.7 01:30 01:31 66.2 55.6 99.4 49.7 01:30 01:34 66.2 55.6 99.4 49.7 01:30 01:35 02:30 65.6 55.3 99.5 44.7 01:30 02:30 65.6 55.4 98.4 48.4 46.7 02:30 02:30 65.6 54.4 98.4 46.7 02:30 02:30 65.6 54.4 98.4 46.7 02:30 02:30 65.1 54.2 98.7 44.8 02:30 02:31 65.1 54.2 98.7 44.9 04:50 04:30 66.1 54.2 98.7 44.9 04:50 04:35 66.1 54.2 98.7 44.9 04:50 04:35 66.1 54.2 98.7 44.9 04:50 04:35 66.3 56.3 60.5 66.1 99.7 <td></td> <td>00:45</td> <td></td> <td>72.6</td> <td>56.6</td> <td>599</td> <td>46.8</td>		00:45		72.6	56.6	599	46.8
01:00 0:01:15 26.4 26.6 28.4 19 01:30 01:345 66.2 26.6 28.4 47 01:30 01:345 66.5 55.3 59.5 47 01:30 01:35 02:30 65.6 55.4 48.4 48 02:30 02:35 05.6 54.4 58.4 46 02:30 02:45 65.4 54.3 58.8 46 02:30 02:45 65.4 54.2 55.0 44 03:30 03:31 57.9 44 63.4 58.8 59.3 45 03:30 03:45 80.2 56.8 59.3 45 44 03:30 04:13 66.1 59.2 59.3 45 04:33 0:05:30 67.4 58.6 60.0 47 05:30 67.4 58.6 62.0 42 55 05:31 05:30 67.4 58.6 62.0 42		01.00	- 01:00	66.3	561	50.0	10.0
0113 0113 0113 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 0213 <th< td=""><td></td><td></td><td>- 01.15</td><td>64.4</td><td>56.0</td><td>50.5</td><td>40.8</td></th<>			- 01.15	64.4	56.0	50.5	40.8
01:20 0:20 00:2 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 00:20 0		01.15	- 01:20	66.3	50.0	59.4	4/.4
01.32 - 04.25 08.5. 05.3.3 95.4. 47.7 01.33 - 02.13 76.9 57.0 95.8. 47.7 02.33 - 02.36 65.6 95.4. 95.1 45.8 02.34 - 02.35 65.6 94.4 88.4 46.6 02.34 - 02.30 65.6 94.4 88.4 46.6 02.345 - 02.30 65.6 93.4.2 55.2 44.4 03.35 - 03.345 80.2 56.6 44.7 57.7 55.6 44.4 04.30 0.4.45 66.3 56.3 60.0 47.7 65.0 66.2 55.1 60.0 47.7 05.30 - 04.33 56.6 56.7 60.6 67.7 65.6 67.7 66.6 49.9 63.3 65.5 57.7 66.6 69.3 55.3 54.4 64.7 55.7 66.6 69.3 55.7		01.15	01:50	00.2	55.6	59.4	48,2
01-43 - 02-00 65.6 55.3 59.5 66 02-30 - 02-31 65.6 54.4 58.4 66 02-30 - 02-31 65.6 54.4 58.4 66 02-30 - 02-31 65.6 58.4 59.1 49 02-37 - 02-30 66.4 59.2 59.2 44 03-30 - 02-30 66.1 54.2 59.3 46 03-30 - 02-30 66.1 54.2 59.3 46 04-30 - 04-31 66.1 54.2 59.3 46 04-30 - 04-35 66.1 59.2 60.2 59.1 60.0 47 04-30 - 05-35 67.4 59.6 62.9 55.1 06-30 - 06-31 69.3 59.6 62.9 55.1 06-30 - 06-45 76.0 61.7		01:30	- 01:45	68.5	55.9	59.4	47.3
02:00 - 02:15 76.9 57.0 59.8 47. 02:30 - 02:45 65.6 54.4 58.8 46. 02:30 - 02:31 63.0 53.1 57.9 44. 03:30 - 03:34 80.2 56.8 59.3 45. 03:30 - 03:44 80.2 56.8 59.3 45. 04:03 - 04:13 66.1 59.4 49.0 44. 04:03 - 04:13 66.1 59.2 59.3 45. 04:03 - 06:04 61.1 59.2 59.3 45. 04:03 - 06:05 61.1 59.2 59.2 44. 04:03 - 06:07 11.1 59.2 62.9 51.5 06:30 06.9 06.3 66.3 56.3 45.3 59.7 06:43 - 06:07 71.1 59.2 69.2 51.5 <td></td> <td>01:45</td> <td>- 02:00</td> <td>65.6</td> <td>55.3</td> <td>59.5</td> <td>46.5</td>		01:45	- 02:00	65.6	55.3	59.5	46.5
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01-30 - 04-45 - 56.3 - 60.1 47 01-35 - 05.15 - 65.6 56.1 60.0 47 05.15 - 05.30 67.4 55.77 66.16 47 05.33 - 05.45 07.4 55.77 66.16 62.9 55.3 05.60 - 06.15 09.3 59.2 62.9 55.3 06.61 - 06.61.5 07.0 74.4 66.1.3 66.1 56.1 99.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0<		04:15	- 04:30	81.6	577	59.6	44.8
01435 0500 0623 363 003 147 0513 0530 66.6 36.7 60.6 47 0513 0530 67.4 57.7 61.6 47 0513 0630 67.4 57.7 61.6 47 05345 0630 67.4 57.7 61.6 47 05345 0630 62.9 60.3 63.5 54.4 0635 07.00 7.4.4 61.3 64.0 55.6 07135 07.15 07.30 81.2 61.3 63.8 55.7 07135 07.45 7.2.3 62.4 65.1 57.7 07435 0.845 7.2.7 62.3 64.7 58 07435 0.845 7.2.7 62.3 64.7 58 07435 0.845 7.2.7 62.3 64.7 58 0745 0.930 7.3.9 62.2 64.7 58 09435 0.945		04.30	- 04:45	66.2	56.2	60 E	47.0
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05:30 - 05:45 - 66:00 71.1 59.2 62.3 51.3 06:00 - 06:15 - 06:30 63.5 53.6 62.9 53.1 06:00 - 06:45 76.0 61.7 64.7 55.6 06:30 - 06:45 77.00 74.4 65.13 64.0 55.7 07:30 - 07:35 77.3 62.4 65.1 97.7 07:45 - 06:30 72.3 62.4 65.1 97.7 07:45 - 06:30 72.3 62.4 65.1 97.7 06:50 72.3 62.4 65.6 99.7 99.7 62.2 64.7 98.8 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 99.7 </td <td>1</td> <td>05:15</td> <td>- 05:30</td> <td>67.4</td> <td>57.7</td> <td>61.6</td> <td>49.7</td>	1	05:15	- 05:30	67.4	57.7	61.6	49.7
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06:00 - 06:15 - 06:30 69:30 60:3 63:5 52:30 06:30 - 07:00 74:0 61:1 64:7 55:30 67:30 67:35 67:30 67:35 67:30 67:35 67:30 67:35 67:30 67:35 67:30 67:37 67:30 67:31 66:32 67:32 67:30 67:33 66:38 55:37:33.4 66:38 67:35 67:30 67:33 66:30 77:34 66:32 67:33 66:35 77:34 66:31 65:36 59:35 69:30 77:39 67:7 66:27 64:5 59:35 69:30 77:39 67:7 66:43 64:4 57:7 10:30 77:4 66:31 65:1 757 10:30 77:4 66:43 64:4 57:7 10:30 77:4 66:43 64:4 57:7 10:30 77:4 66:31 65:1 757 10:30 77:4 66:43 64:4 57:7 10:30 77:4 66:43		05:45	- 06:00	71.1	59.2	62.9	51.4
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Construct Part of the second sec		06:45	07:00	70.0	01.7	04.7	55,4
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$ \begin{array}{c} 07.45 & - 08:00 & 73.1 & 62.0 & 64.3 & 57 \\ 08:15 & - 08:30 & 73.4 & 66.8 & 64.3 & 58 \\ 08:30 & - 08:45 & 72.7 & 62.3 & 64.7 & 58 \\ 08:30 & - 08:45 & 72.7 & 62.3 & 64.7 & 58 \\ 08:30 & - 09:45 & 73.9 & 62.7 & 64.5 & 56 \\ 09:30 & - 09:45 & 73.9 & 62.7 & 64.5 & 56 \\ 09:30 & - 09:45 & 86.1 & 66.3 & 66.4 & 57 \\ 09:30 & - 09:45 & 86.1 & 66.3 & 66.4 & 57 \\ 10:00 & 10:15 & 80.2 & 62.9 & 64.8 & 57 \\ 10:00 & - 10:15 & 80.2 & 62.9 & 64.8 & 57 \\ 10:30 & - 10:45 & 70.6 & 61.5 & 64.4 & 57 \\ 10:30 & - 10:45 & 70.6 & 61.5 & 64.4 & 57 \\ 10:30 & - 10:45 & 70.6 & 61.5 & 64.4 & 57 \\ 10:30 & - 10:45 & 70.6 & 61.5 & 64.4 & 57 \\ 10:30 & - 11:15 & 67.9 & 60.7 & 63.0 & 56 \\ 11:30 & - 11:45 & 69.1 & 60.6 & 63.3 & 56 \\ 11:45 & - 12:30 & 90.5 & 68.9 & 64.5 & 56 \\ 11:45 & - 12:30 & 90.5 & 68.9 & 64.5 & 56 \\ 12:30 & - 12:45 & 66.8 & 60.2 & 63.0 & 55 \\ 12:30 & - 12:45 & 66.8 & 60.2 & 63.0 & 55 \\ 12:30 & - 13:15 & 75.9 & 60.5 & 63.0 & 55 \\ 13:30 & - 13:15 & 75.9 & 60.5 & 63.0 & 55 \\ 13:30 & - 13:45 & 77.0 & 60.0 & 62.5 & 54.4 & 54 \\ 13:45 & - 14:30 & 70.3 & 60.4 & 63.1 & 55 \\ 13:30 & - 13:45 & 77.0 & 60.0 & 62.5 & 54 \\ 13:45 & - 14:30 & 70.3 & 60.4 & 63.1 & 55 \\ 13:45 & - 14:30 & 77.3 & 60.3 & 63.2 & 55 \\ 13:45 & - 14:30 & 77.0 & 60.0 & 62.5 & 54 \\ 14:45 & - 15:00 & 77.5 & 60.4 & 63.4 & 55 \\ 13:45 & - 14:30 & 77.3 & 60.3 & 63.2 & 55 \\ 14:45 & - 15:30 & 77.3 & 60.3 & 63.2 & 54 \\ 15:15 & - 16:30 & 70.1 & 60.2 & 62.8 & 55 \\ 16:30 & - 16:15 & 76.6 & 60.3 & 63.2 & 55 \\ 16:30 & - 16:48 & 77.2 & 60.7 & 63.0 & 55 \\ 16:45 & - 17:00 & 83.0 & 64.4 & 63.3 & 55 \\ 16:45 & - 16:30 & 77.1 & 60.3 & 63.2 & 54 \\ 17:30 & - 18:48 & 77.0 & 85.0 & 64.4 & 63.3 & 55 \\ 16:45 & - 17:00 & 83.0 & 64.4 & 63.5 & 55 \\ 16:45 & - 17:00 & 83.0 & 64.4 & 63.5 & 55 \\ 16:45 & - 17:00 & 83.0 & 64.4 & 63.5 & 55 \\ 16:45 & - 17:00 & 83.0 & 64.4 & 63.5 & 55 \\ 16:45 & - 17:00 & 73.5 & 60.7 & 63.0 & 55 \\ 18:45 & - 18:30 & 78.4 & 59.4 & 62.0 & 55 \\ 18:45 & - 18:30 & 78.4 & 59.4 & 62.0 & 55 \\ 19:30 & - 19:45 & 75.3 & 60.7 & 63.4 & 55 \\ 19:30 & - 19:45 & 75.3 & 60.7 & 63.4 & 55 \\ 19$		07:30	- 07:45	72,3	62,4	65,1	57.3
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Construct Construct <thconstruct< th=""> <thconstruct< th=""> <thc< td=""><td></td><td>08.15</td><td>- 08.30</td><td>72.4</td><td>62.0</td><td>65.0</td><td>50.0</td></thc<></thconstruct<></thconstruct<>		08.15	- 08.30	72.4	62.0	65.0	50.0
Construct Construct <thconstruct< th=""> <thconstruct< th=""> <thc< td=""><td></td><td>08:20</td><td>00.50</td><td>73.4</td><td>63,0</td><td>65,6</td><td>59.1</td></thc<></thconstruct<></thconstruct<>		08:20	00.50	73.4	63,0	65,6	59.1
Gency 77.4 63.1 65.1 58 09:00 - 09:15 79.6 62.7 64.5 58 09:30 - 09:45 86.1 64.3 64.4 57 09:30 - 09:45 86.1 64.3 64.4 57 09:35 - 10:00 81.2 62.6 65.1 57 10:15 - 10:30 71.0 61.0 64.8 57 10:30 - 10:45 70.6 61.5 64.4 57 10:30 - 11:45 66.9 63.3 56 11:30 - 11:45 66.1 63.3 56 11:30 - 11:45 66.8 60.2 63.0 55 11:45 - 11:30 71.4 60.8 63.3 56 11:45 - 11:30 71.4 60.8 63.3 55 11:45 - 11:30 71.6 60.4 63.1 55 11:45 - 11:30 72.5 60.5 63.0		08:30	- 08:45	12.1	62,3	64.7	58.5
OPTOD · 09:15 79.6 62.7 64.5 58 09:30 - 09:30 73.9 62.2 64.7 58 09:30 - 09:45 86.1 64.3 64.4 57 10:00 - 10:15 80.2 62.9 64.8 57 10:00 - 10:15 80.2 62.9 64.8 57 10:15 - 10:30 71.0 61.0 64.0 56 10:15 - 11:00 71.4 60.9 63.3 56 11:15 - 11:30 71.4 60.8 63.3 56 11:15 - 11:30 71.4 60.6 63.3 56 11:15 - 11:30 71.4 60.8 63.3 55 11:30 - 11:45 65.8 60.2 63.0 55 11:30 - 11:45 66.8 60.2 63.0 55 11:30 - 11:45 67.9 60.2 63.0 55 11:30 - 13:30 <td></td> <td>08:45</td> <td>- 09:00</td> <td>77.4</td> <td>63,1</td> <td>65,1</td> <td>58.2</td>		08:45	- 09:00	77.4	63,1	65,1	58.2
09:15 09:30 09:45 86.1 64.3 64.4 57 09:45 10:00 81.2 62.6 65.1 57 10:15 10:30 71.0 61.0 64.0 56 10:15 10:30 71.0 61.0 64.0 56 10:30 17.0 61.5 64.4 57 10:30 17.0 61.5 64.4 57 10:30 11.45 67.9 60.7 63.0 56 11:30 11.45 66.1 63.3 56 56 56.9 64.5 56 11:30 11:45 66.8 60.2 63.0 55 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 </td <td></td> <td>09:00</td> <td>- 09:15</td> <td>79.6</td> <td>62.7</td> <td>64.5</td> <td>56.7</td>		09:00	- 09:15	79.6	62.7	64.5	56.7
09:30 - 09:45 10:00 81.2 62.6 66.1 57.7 10:00 - 10:15 - 10:00 81.2 62.9 64.8 57.7 10:15 - 10:30 11:00 71.0 61.0 64.8 57.7 10:15 - 10:45 70.6 61.5 64.4 57.7 10:45 - 11:00 71.4 60.8 63.3 56.6 11:15 - 11:30 71.4 60.8 63.3 56.6 11:45 - 12:200 71.6 60.6 63.3 56.7 12:30 - 12:45 66.8 60.2 63.0 55.7 12:30 12:45 66.8 60.2 63.0 55.7 13:30 71.5 61.0 63.8 55.7 13:30 13:45 77.0 60.2 62.2 55.7 14:30 14:45 77.0 60.2 62.2 55.7 14:30 </td <td></td> <td>09:15</td> <td>- 09:30</td> <td>73.9</td> <td>62.2</td> <td>64.7</td> <td>58.1</td>		09:15	- 09:30	73.9	62.2	64.7	58.1
09:45 10:00 81.2 62.6 66.1 37 10:00 -10:15 80.2 62.9 64.8 57 10:15 -10:30 71.0 61.0 64.0 55 10:30 -10:45 70.6 61.5 64.4 57 10:45 -11:00 71.6 60.9 63.3 56 11:30 -11:45 66.1 60.7 63.0 56 11:30 -11:45 69.1 60.6 63.3 56 11:30 -11:45 67.7 62.4 64.3 57 12:00 12:15 67.6 60.3 63.0 55 12:45 13:00 70.8 60.2 63.0 55 13:30 -13:45 77.9 60.2 63.0 55 13:30 -13:45 77.9 60.2 62.9 55 14:45 14:30 70.3 60.4 63.0 55 13:30 13:45 77.9<		09:30	- 09:45	86.1	64.3	64.4	57.2
10:00 10:15 30.2 62.3 64.8 57 10:15 10:30 11.0 61.0 64.8 57 10:15 10:045 70.6 61.5 64.4 57 10:45 11:00 71.6 60.9 63.3 56 11:15 11:30 71.4 60.6 63.3 56 11:15 11:30 71.4 60.6 63.3 56 11:15 11:30 71.4 60.6 63.3 56 11:15 11:30 71.4 60.6 63.3 56 11:15 11:30 71.4 60.6 63.3 55 12:30 12:45 66.8 60.2 63.0 55 12:30 12:45 66.8 60.2 63.0 55 13:30 13:45 77.0 60.2 62.9 55 13:30 13:45 77.0 60.2 62.9 55 14:45 15:00 72.5		09:45	- 10:00	81.2	62.6	65.1	57.5
10:15 10:30 71.0 64.0 56 10:30 10:30 10:45 70.6 61.5 64.4 57 10:45 11:00 71.6 60.9 63.3 56 11:10 11:15 67.9 60.7 63.0 56 11:10 11:15 67.9 60.7 63.3 56 11:10 11:15 67.6 60.3 63.3 56 11:30 11:45 66.8 60.2 63.3 56 11:30 11:45 66.8 60.2 63.0 55 12:30 12:45 66.8 60.2 63.0 55 13:30 13:45 77.0 60.0 62.5 54 13:30 13:45 77.0 60.0 62.5 54 13:30 13:45 77.0 60.0 62.7 55 14:40 78.8 62.5 64.3 56 13:30 13:45 77.3 60.3		10:00	- 10.15	80.2	62.0	64.9	570
10.1.2 10.045 70.6 61.0 64.4 57 10.45 10.045 70.6 61.5 64.4 57 10.45 11:00 71.6 60.9 63.3 56 11:15 11:15 67.9 60.7 63.0 56 11:15 11:30 71.4 60.8 63.3 56 11:15 11:30 71.4 60.6 63.3 56 11:15 11:45 60.1 60.6 63.3 56 11:15 12:15 67.6 60.3 63.0 55 12:15 12:15 67.6 60.3 63.0 55 12:30 12:45 68.9 60.2 63.0 55 13:15 13:30 74.5 61.0 63.8 55 13:30 13:45 77.0 60.2 62.2 55 14:30 14:45 79.8 60.2 64.3 56 14:30 14:45 79.8		10:15	10:10	71.0	02.9	04.0	57.9
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10:45 11:00 71.6 60.9 63.3 56 11:00 11:15 67.9 60.7 63.0 56 11:15 11:30 71.4 60.8 63.3 56 11:15 11:30 71.4 60.8 63.3 56 11:15 11:30 71.4 60.6 63.3 56 11:15 12:30 90.5 68.9 64.5 56 12:30 12:45 66.8 60.2 63.0 55 12:00 12:45 66.8 60.2 63.0 55 13:00 13:15 75.9 60.5 63.0 55 13:00 13:30 74.5 61.0 63.8 55 13:30 13:34 77.0 60.2 62.5 54 14:30 70.3 60.4 63.7 55 14:30 70.3 60.4 63.7 55 15:30 15:30 74.2 61.7 64.2	50	10:30	- 10:45	70.6	61.5	64.4	57.0
11:00 11:15 67.9 60.7 63.0 56 11:15 11:30 71.4 60.8 63.3 56 11:15 11:30 71.4 60.8 63.3 56 11:15 11:30 71.4 60.8 63.3 56 11:15 12:30 76.7 62.4 64.3 57 12:15 12:30 90.5 68.9 64.5 56 12:30 12:45 13:00 70.8 60.4 63.1 55 13:00 13:45 75.9 60.5 63.0 55 13:30 13:45 77.0 60.0 62.5 54 13:30 13:45 77.0 60.2 62.9 55 14:30 74.5 61.0 63.8 55 14:30 14:45 79.8 62.5 64.3 56 14:45 15:00 72.5 60.4 62.7 55 15:30 15:45 76.1	20	10:45	- 11:00	71.6	60.9	63.3	56.9
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	e l	11:00	- 11:15	67.9	60.7	63.0	56.8
11:30 11:45 69,1 60,6 63,3 36 11:45 12:00 76,7 62,4 64,3 57 12:15 12:15 67,6 60,3 63,0 55 12:15 12:30 90,5 68,9 64,5 56 12:30 12:45 66,8 60,2 63,0 55 13:30 13:30 74,5 61,0 63,8 55 13:30 13:45 77,0 60,0 62,5 54 13:30 13:45 77,0 60,2 62,9 55 14:15 67,9 60,2 62,9 55 14:15 14:30 70,3 60,4 63,7 55 14:30 14:45 79,8 62,5 64,3 56 15:30 15:45 70,3 60,3 63,4 55 15:00 15:45 70,3 60,3 63,2 54 16:00 16:15 76,1 61,0	q	11:15	- 11:30	71.4	60.8	63.3	56.4
11.145 12.200 76.7 62.4 64.3 57.7 12.00 12.15 67.6 60.3 63.0 55. 12:30 12.15 67.6 60.3 63.0 55. 12:30 12.15 66.8 60.2 63.0 55. 12:30 12.15 66.8 60.2 63.0 55. 13:00 13:15 75.9 60.5 63.0 55. 13:00 13:15 77.9 60.2 62.5 54. 13:45 14:00 68.0 59.7 62.2 55. 14:00 14:15 67.9 60.2 62.9 55. 14:30 14:45 79.8 62.5 64.3 55. 14:30 14:45 79.8 62.5 64.3 55. 14:45 15:30 72.5 60.4 62.7 55. 15:30 15:45 70.3 60.3 63.2 54. 15:45 76.6 <td< td=""><td>en</td><td>11:30</td><td>- 11:45</td><td>69.1</td><td>60.6</td><td>63.3</td><td>56.0</td></td<>	en	11:30	- 11:45	69.1	60.6	63.3	56.0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	3	11.45	- 12:00	76.7	62.4	64.2	57.2
11.00 12.13 07.0 60.3 63.0 55 12:15 12:30 90.5 68.9 64.5 56 12:30 12:45 66.8 60.2 63.0 55 12:30 12:45 66.8 60.2 63.0 55 13:00 13:15 77.0 60.5 63.0 55 13:30 13:45 77.0 60.0 62.5 54 13:45 14:00 68.0 59.7 62.2 55 14:00 14:15 67.9 60.2 62.9 55 14:30 14:45 15:00 72.5 60.4 62.7 55 15:00 15:15 75.6 60.8 63.4 56 15:30 15:30 70.3 60.3 63.2 54 15:30 15:45 70.3 60.3 63.2 54 15:30 70.1 60.2 62.8 55 16:45 17:00 17:3 60.1	z	12:00	12.00	10.1	02.4	04.3	57.3
12:15 12:30 12:45 90,5 68,9 64,5 95 12:45 13:00 70,8 60,4 63,1 55 12:45 13:00 70,8 60,4 63,1 55 13:00 13:15 75,9 60,5 63,0 55 13:00 13:15 75,9 60,0 62,5 54 13:30 13:45 77,0 60,0 62,5 54 13:40 14:45 67,9 60,2 62,9 55 14:15 14:30 70,3 60,4 63,0 55 14:45 14:45 79,8 62,5 64,3 56 14:45 15:00 72,5 60,4 62,7 55 15:00 15:15 75,6 60,8 63,4 55 15:00 15:45 70,3 60,3 63,2 54 15:00 16:15 76,1 61,0 63,3 55 16:00 16:15	÷	12:00	12:15	67.6	60,3	63.0	55.6
12:30 12:30 12:30 66.8 60.2 63.0 55 13:00 - 13:15 70.8 60.4 63.1 55 13:00 - 13:15 75.9 60.5 63.0 55 13:00 - 13:45 77.0 60.0 62.5 54 13:45 - 14:00 68.0 59.7 62.2 55 14:15 - 7.9 60.2 62.9 55 14:15 - 14:30 70.3 60.4 63.0 55 14:15 - 14:30 70.3 60.4 63.0 55 14:45 - 15:15 72.5 60.4 62.7 55 15:00 - 15:15 75.6 60.8 63.4 56 15:45 - 16:00 77.3 60.8 63.4 55 15:30 - 15:45 70.3 60.3 63.4 55 16:30 - 16:45 72.2 60.0 62.8 55 16:30 - 16:45	30	12:15	- 12:30	90,5	68,9	64,5	56.1
12:45 13:00 70.8 60.4 63.1 55 13:00 -13:15 75.9 60.5 63.0 55 13:00 -13:15 75.9 60.0 63.8 55 13:30 -13:30 74.5 61.0 63.8 55 13:30 -13:45 77.0 60.0 62.5 54 13:45 -14:00 68.0 59.7 62.2 55 14:00 -14:15 67.9 60.2 62.9 55 14:45 -14:30 70.3 60.4 63.0 55 14:45 -15:00 72.5 60.4 62.7 55 15:00 15:15 75.6 60.8 63.4 56 15:30 -15:45 70.3 60.3 63.2 54 15:30 -16:15 76.1 61.0 63.3 56 16:45 -17:00 77.3 60.8 63.4 55 16:45 -17:00 77	À	12:30	- 12:45	66.8	60.2	63.0	55.7
$ \frac{5}{9} \qquad \begin{array}{c c c c c c c c c c c c c c c c c c c $	p	12:45	- 13:00	70.8	60,4	63,1	55,3
$ \begin{array}{r c c c c c c c c c c c c c c c c c c c$	u l	13:00	- 13:15	75.9	60.5	63.0	55.2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Σ	13:15	- 13:30	74.5	61.0	63.8	55.9
13.32 14.00 68.0 59.7 62.2 55 14:00 14:15 67.9 60.2 62.9 55 14:00 14:15 67.9 60.2 62.9 55 14:15 14:30 70.3 60.4 63.0 55 14:30 14:45 79.8 62.5 64.3 56 14:45 15:00 72.5 60.4 62.7 55 15:00 15:15 75.6 60.8 63.4 56 15:15 15:30 74.2 61.7 64.2 55 15:30 15:45 70.3 60.8 63.4 55 16:00 61:15 76.1 61.0 63.3 56 16:45 72.2 60.0 62.8 55 56 16:45 71.05 60.1 62.7 55 55 17:00 17:15 70.5 60.1 62.7 55 17:30 17:30 85.0	1	13.30	- 13:45	77.0	60.0	62 5	54.4
1.4.75 $1.4.15$ 66.0 39.7 62.2 55 $14:15$ $14:30$ 70.3 60.4 63.0 55 $14:15$ $14:45$ 79.8 62.5 64.3 56 $14:45$ $14:45$ 79.8 62.5 64.3 56 $14:45$ $15:00$ 72.5 60.4 62.7 55 $15:00$ $15:15$ 75.6 60.8 63.4 56 $15:30$ 74.2 61.7 64.2 55 $15:30$ 74.2 61.7 64.2 55 $15:30$ $15:45$ 70.3 60.8 63.4 55 $16:15$ $16:30$ 70.1 60.2 62.8 55 $16:45$ 17.00 85.0 64.4 63.3 55 $17:00$ $17:45$ 80.2 61.3 63.1 54 $17:30$ $17:45$ 80.2 61.3 63.1 54 $17:30$ $17:45$ 80.2 61.3 63.2	-	12.45	- 14:00	69.0	50.7	62,3	54.4
44.30 44.33 $66,9$ 60.2 62.2 62.9 55 $14:30$ $14:30$ 70.3 60.4 63.0 55 $14:30$ $14:45$ 79.8 62.5 64.3 56 $14:45$ $15:00$ 72.5 60.4 62.7 55 $15:00$ $15:15$ 75.6 60.8 63.4 56 $15:15$ $15:30$ 74.2 61.7 64.2 55 $15:30$ $15:45$ 70.3 60.3 63.4 55 $16:00$ $16:15$ 76.1 61.0 63.3 56 $16:15$ $16:30$ 70.1 60.2 62.8 55 $16:30$ $16:45$ 72.2 60.0 62.8 55 $16:30$ $16:45$ 72.2 60.0 62.8 55 $16:30$ $16:45$ 72.2 60.0 62.8 55 $16:30$ $17:70$ 85.3 64.4 63.5 54 $17:30$ $17:45$ 80.2 61.3 63.1 54 $17:30$ $17:45$ 80.2 61.3 63.2 54 $18:00$ $18:15$ 83.4 63.6 63.0 55 $18:15$ $18:30$ 68.4 59.4 62.0 54 $19:30$ $19:45$ 70.9 59.4 61.7 55 $19:30$ $19:45$ 75.3 60.7 63.4 55 $19:30$ $19:45$ 75.3 60.7 63.4 55 $19:30$ $19:45$ 7		13.45	14.00	08.0	59.7	62.2	55.6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		14:00	- 14:15	67.9	60.2	62.9	55,2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		14:15	- 14:30	70,3	60.4	63.0	55.6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		14:30	- 14:45	79.8	62.5	64.3	56.4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		14:45	- 15:00	72.5	60.4	62.7	55.9
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		15:00	- 15:15	75.6	60.8	63.4	56.6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		15:15	- 15:30	74.2	61.7	64.2	55.9
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		15-20	- 15:45	70.2	60.2	62.2	55.0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		15.50	15:45	/0.3	60,3	63,2	54.1
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		15:45	- 16:00	11.3	60.8	63.4	55.4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		16:00	- 16:15	76.1	61.0	63.3	56.4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		16:15	- 16:30	70.1	60.2	62.8	55.6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		16:30	- 16:45	72.2	60,0	62,8	55,2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		16:45	- 17:00	85.3	64.4	63,3	55.0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		17:00	- 17:15	70.5	60.1	62.7	55.5
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		17:30	- 17:45	80.2	61.2	63.5	EAE
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		17:45	19:00	74.7	01.3	63.1	54.5
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		10.00	18:15	83.4	63.6	63.0	55.1
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		18:15	- 18:30	68.4	59.4	62.0	54.7
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		18:30	- 18:45	69.1	60.1	62.7	55.6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		18:45	- 19:00	73.5	60.7	63.0	55.0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		19:00	- 19:15	78.2	60.6	62.5	54.5
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		19:15	- 19:30	70.9	59.4	61.7	55.2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		19:30	- 10.45	75.3	53.4	63.4	55.2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		10:45	20.00	75.5	50.7	00,4	53.2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		20.00	20.00	18.4	59.5	62.0	52.1
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		20:00	- 20:15	69.2	58.7	61.1	53.4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		20:15	- 20:30	77.1	58,9	61,6	52.5
20:45 - 21:00 67.3 58.4 61.6 52 21:00 - 21:15 67.9 57.9 61.0 52 21:15 - 21:30 75.7 59.5 62.2 53 21:30 - 21:45 72.5 58.3 61.3 52 21:45 - 22:00 66.9 58.3 61.3 52 22:00 - 22:15 67.8 58.1 61.1 52	(20:30	- 20:45	67.0	59,6	62.7	54.3
21:00 - 21:15 67.9 57.9 61.0 52 21:15 - 21:30 75.7 59.5 62.2 53 21:30 - 21:45 72.5 58.3 61.3 52 21:45 - 22:00 66.9 58.3 61.3 52 22:00 - 22:15 67.8 58.1 61.1 52		20:45	- 21:00	67.3	58.4	61.6	52.1
21:15 - 21:30 75.7 59.5 62.2 53 21:30 - 21:45 72.5 58.3 61.3 52 21:45 - 22:00 66.9 58.3 61.3 52 22:00 - 22:15 67.8 58.1 61.1 52		21:00	- 21.15	67.9	570	61.0	52.1
21:30 - 21:45 72.5 58.3 61.3 52 21:45 - 22:00 66.9 58.3 61.3 52 22:00 - 22:15 67.8 58.1 61.1 52		21.15	- 21.20	75.7	57.5	61.0	52.1
21:30 - 21:45 - 72,5 58,3 61,3 522 21:45 - 22:00 66,9 58,3 61,3 52 22:00 - 22:15 67,8 58,1 61,1 52		21.15	21:50	15.1	59.5	62.2	53.1
21:45 - 22:00 66.9 58.3 61.3 52 22:00 - 22:15 67.8 58.1 61.1 52		21:30	- 21:45	12.5	58.3	61,3	52,4
22:00 - 22:15 67.8 58.1 61.1 52		21:45	- 22:00	66.9	58.3	61.3	52.6
		22:00	- 22:15	67.8	58.1	61.1	52.4
22:15 - 22:30 68.9 57.5 60.8 50	1	22:15	- 22:30	68.9	57.5	60.8	50.6
22:30 - 22:45 66.0 57.5 60.6 51		22:30	- 22:45	66.0	57.5	60.6	51.6
22:45 - 23:00 75.0 58.6 61.4 51		22:45	- 23:00	75.0	58.6	61.4	51 1
23:00 - 23:15 69.5 59.9 61.9 53		23:00	- 23.15	69.5	58.9	61.9	52.1
23:15 - 23:30 664 676 600 52		22.15	- 23.20	65.3	50.0	61.0	52.1
23:20 23:45 00,4 57,6 60,8 50		23.13	23.50	00.4	57.6	60.8	50.5
23.30 - 23.43 68.9 58.2 61.4 49		25:30	- 23:45	68,9	58.2	61,4	49.9

Date	Tir	ne	Measured Broadband Sound Pressure Levels, dB			
	00.00		LAFINIAX	LAeq	LAIU CO.F	LA90
	00.00	00.15	/1.3	57.3	60.5	49.4
	00.13 -	00.30	66.3	56.0	59.8	47.5
	00.30	01:00	68.9	57.3	60.8	48.9
	01:00	01:00	68.4	56.4	60.1	47.9
	01.00	01.13	65.8	55.5	59.3	46.8
	01:13 -	01.50	66.0	55.7	59.6	46.7
	01:30 -	01:45	65.4	55.2	59.3	46.2
	01:45 -	02:00	/1.2	54.5	58.7	44.8
	02:00 -	02:15	66.8	53.7	58.0	44.5
	02:15 -	02:30	/1.4	54.7	58.5	45.0
	02:30	02:45	64.8	53.4	57.8	44.9
	02:45	03:00	67.2	54.4	58.7	45.0
	03:00 -	03:15	66.6	54.7	59,1	45.2
	03:15 -	03:30	63.6	54.5	58.8	45.7
	03:30 -	03:45	65.8	54.0	58.6	44.8
	03:45 -	04:00	66.7	54.5	58.9	44.5
	04:00 -	04:15	69.5	54.8	59.1	45.3
	04:15 -	04:30	64.7	55.2	59.7	44.6
	04:30 -	04:45	66.2	55.4	59.8	45.1
	04:45 -	05:00	67.9	55.9	60,1	45.5
	05:00 -	05:15	72.7	56,9	60.4	46.0
6	05:15 -	05:30	67.0	56.5	60.5	46.6
00	05:30 -	05:45	69.9	57.5	61.4	47.9
12	05:45 -	06:00	67.6	57.6	61.4	47.9
pe	06:00 -	06:15	81.6	59.9	62.4	51.2
en	06:15 -	06:30	69.5	58.9	61.9	52.8
Dec	06:30 -	06:45	70.0	60.1	63.1	53.2
ti	06:45 -	07:00	79.0	60.6	62.9	54.4
13	07:00 -	07:15	73,6	60,3	63.2	54.1
lay	07:15 -	07:30	69.9	59,9	62.9	53.8
esc	07:30 -	07:45	70,9	60,6	63,3	55.1
2 L	07:45 -	08:00	91.7	68.7	64.3	56.3
	08:00 -	08:15	75.4	60.9	63.5	55.9
	08:15 -	08:30	88.0	67.1	65.0	56.3
	08:30 -	08:45	77.7	62.1	64.2	57.3
	08:45 -	09:00	78.9	62.0	64.5	56.2
	09:00 -	09:15	70.4	61.1	63.7	56.9
	09:15 -	09:30	73.6	61.5	64.1	57.0
	09:30 -	09:45	69.4	60.6	62.8	57.4
	09:45 -	10:00	71.0	60.5	62.8	57.3
	10:00 -	10:15	77.9	62,3	65.0	57.5
	10:15 -	10:30	77.2	60,8	63.3	57.0
	10:30 -	10:45	74.1	61.0	63.0	57.2
	10:45 -	11:00	77.2	60.0	62.1	56.2
	11:00 -	11:15	72.1	60,7	62.9	57.0
	11:15 -	11:30	76.6	62,0	63.8	57.5
	11:30 -	11:45	78.9	60.0	61.8	54.6
	11:45 -	12:00	66.9	59,5	62.2	55.5
	12:00 -	12:15	74.9	60.3	62.6	55.8
	12:15 -	12:30	76.6	60.0	62.4	55.2
	12:30 -	12:45	76.9	59.6	62.2	54.2
	12:45 -	13:00	75.5	61.5	63.9	56.3
	13:00 -	13:15	79.7	61.4	63,4	55.1
	13:15 -	13:30	81.1	60.4	62.9	55.4

Note: The background noise level is denoted by $L_{A90,T}$ measurements

Appendix 3 Site Layout

