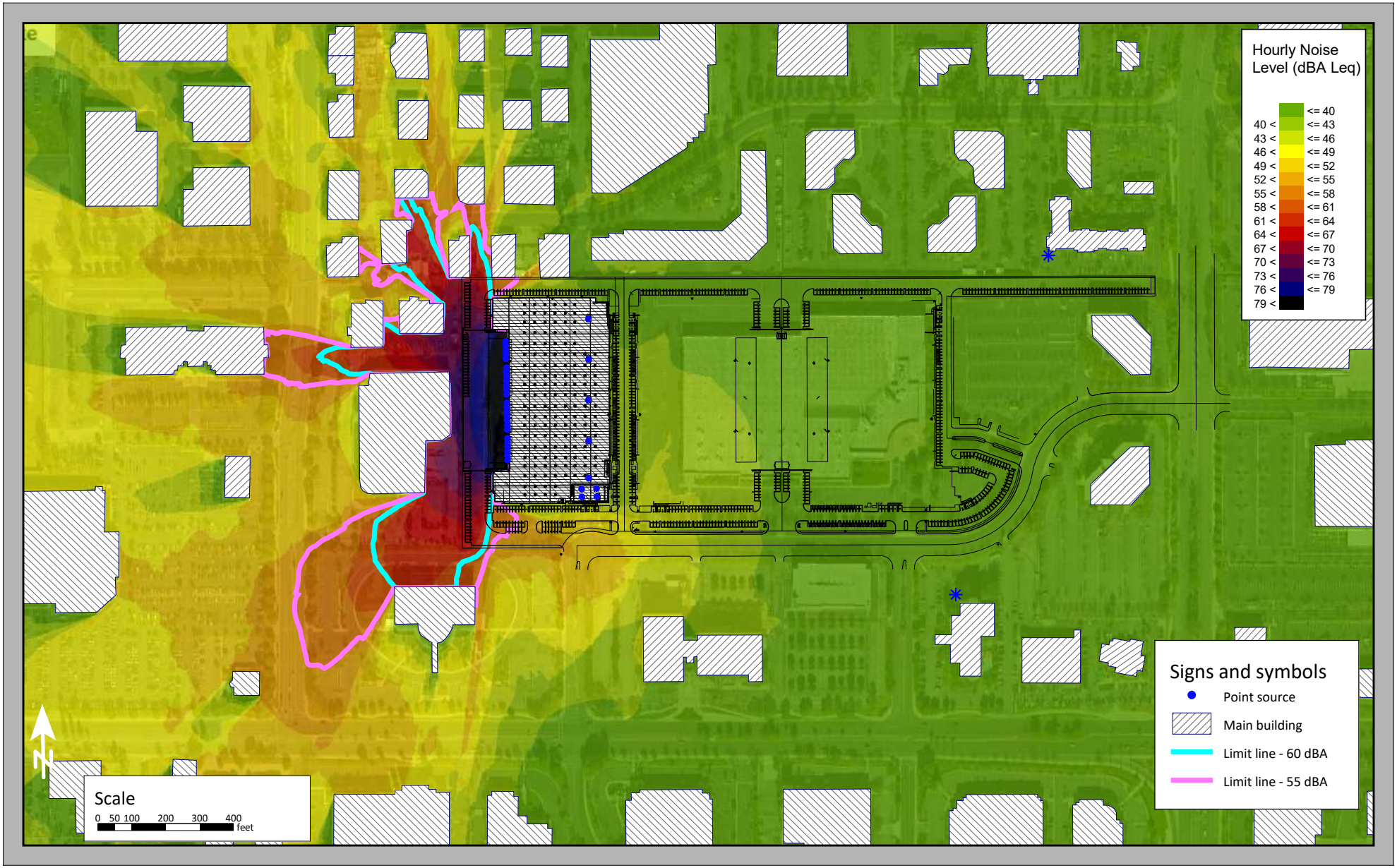
5665 Plaza Dr

Project No. CCP2201.04

Project Operational Noise Levels



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Noise Measurement Survey – 24 HR

Project Number: CCP2201.04
Project Name: 5665 Plaza Drive

Test Personnel: Kevin Nguyendo
Equipment: Spark 706RC (SN:905)

Site Number: LT-1 Date: 10/10/23

Time: From 1:00 p.m. To 1:00 p.m.

Site Location: 5865 Katella Avenue, Cypress, CA. Along the northern property line of the Marriott hotel on a utility pole.

Primary Noise Sources: Traffic on Plaza Drive, McDonnell Drive and Katella Avenue.

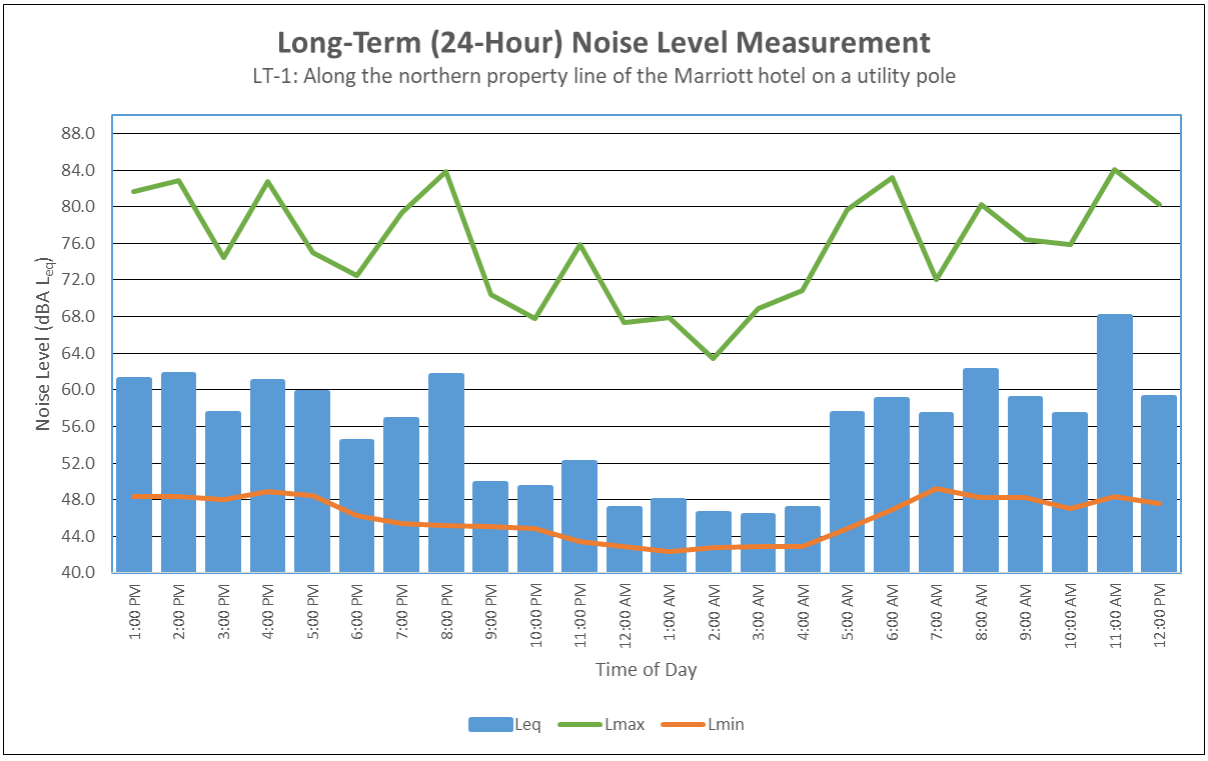
Comments:

Photo:

Long-Term (24-Hour) Noise Level Measurement Results at LT-1

Start Time	Date	Noise Level (dBA)		
		L_{eq}	L_{max}	L_{min}
1:00 PM	10/10/23	61.1	81.7	48.3
2:00 PM	10/10/23	61.7	82.9	48.3
3:00 PM	10/10/23	57.4	74.4	48.0
4:00 PM	10/10/23	60.9	82.8	48.9
5:00 PM	10/10/23	59.7	75.0	48.5
6:00 PM	10/10/23	54.3	72.5	46.3
7:00 PM	10/10/23	56.8	79.4	45.4
8:00 PM	10/10/23	61.6	83.8	45.2
9:00 PM	10/10/23	49.7	70.4	45.1
10:00 PM	10/10/23	49.3	67.8	44.9
11:00 PM	10/10/23	52.0	75.9	43.4
12:00 AM	10/11/23	47.0	67.4	42.9
1:00 AM	10/11/23	47.9	67.9	42.3
2:00 AM	10/11/23	46.5	63.4	42.8
3:00 AM	10/11/23	46.2	68.9	42.9
4:00 AM	10/11/23	47.1	70.8	42.9
5:00 AM	10/11/23	57.4	79.7	44.8
6:00 AM	10/11/23	59.0	83.2	46.9
7:00 AM	10/11/23	57.3	72.0	49.2
8:00 AM	10/11/23	62.1	80.2	48.2
9:00 AM	10/11/23	59.0	76.4	48.2
10:00 AM	10/11/23	57.3	75.9	47.0
11:00 AM	10/11/23	68.0	84.1	48.4
12:00 PM	10/11/23	59.2	80.2	47.6

Source: Compiled by LSA Associates, Inc. (2023).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum measured sound level



Noise Measurement Survey – 24 HR

Project Number: CCP2201.04
Project Name: 5665 Plaza Drive

Test Personnel: Kevin Nguyendo
Equipment: Spark 706RC (SN:119)

Site Number: LT-2 Date: 10/10/23

Time: From 1:00 p.m. To 1:00 p.m.

Site Location: 5990 Corporate Avenue, Cypress, CA. Near the southwestern property line of The Extended Stay America hotel on a tree.

Primary Noise Sources: Traffic on Valley View Street. Parking lot activity.

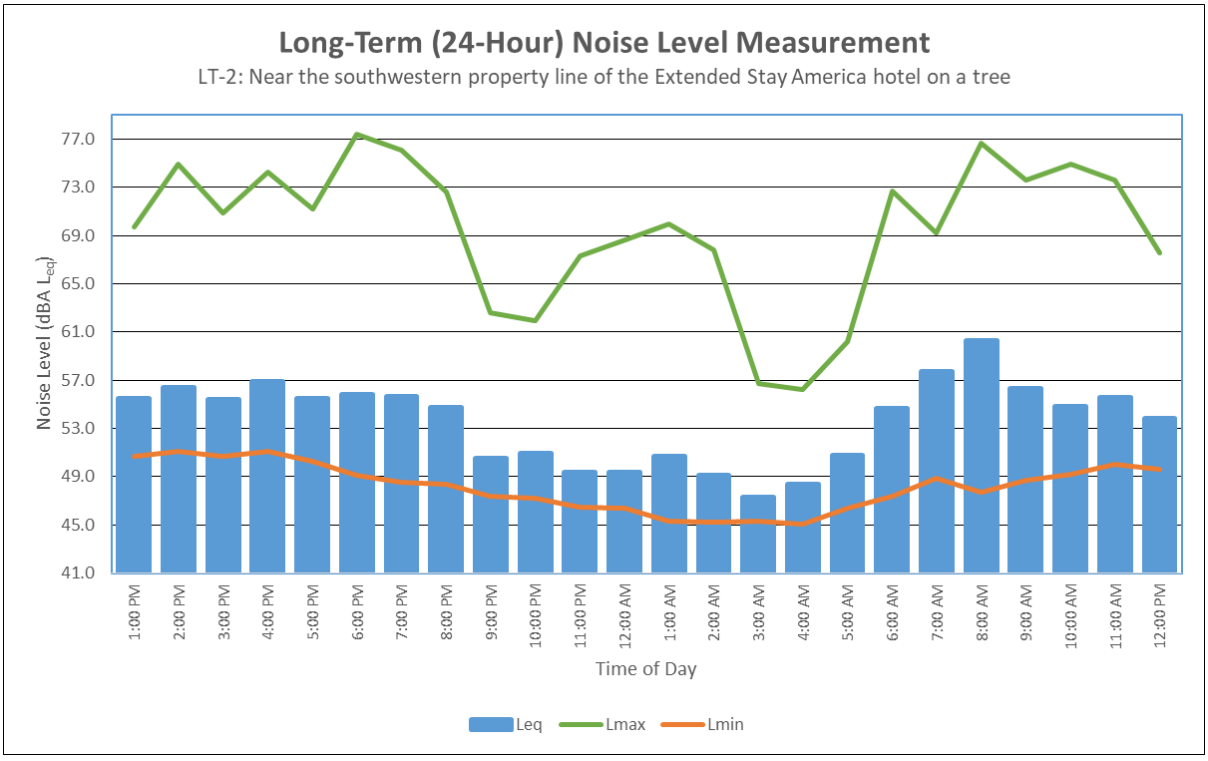
Comments:

Photo:

Long-Term (24-Hour) Noise Level Measurement Results at LT-2

Start Time	Date	Noise Level (dBA)		
		L_{eq}	L_{max}	L_{min}
1:00 PM	10/10/23	55.5	69.7	50.7
2:00 PM	10/10/23	56.4	74.9	51.1
3:00 PM	10/10/23	55.4	70.9	50.7
4:00 PM	10/10/23	56.9	74.3	51.1
5:00 PM	10/10/23	55.5	71.2	50.3
6:00 PM	10/10/23	55.8	77.4	49.1
7:00 PM	10/10/23	55.7	76.1	48.5
8:00 PM	10/10/23	54.7	72.6	48.4
9:00 PM	10/10/23	50.5	62.6	47.4
10:00 PM	10/10/23	50.9	61.9	47.2
11:00 PM	10/10/23	49.4	67.3	46.5
12:00 AM	10/11/23	49.4	68.6	46.4
1:00 AM	10/11/23	50.7	70.0	45.3
2:00 AM	10/11/23	49.1	67.8	45.2
3:00 AM	10/11/23	47.3	56.7	45.3
4:00 AM	10/11/23	48.4	56.2	45.1
5:00 AM	10/11/23	50.8	60.2	46.4
6:00 AM	10/11/23	54.6	72.7	47.4
7:00 AM	10/11/23	57.7	69.2	48.9
8:00 AM	10/11/23	60.3	76.7	47.7
9:00 AM	10/11/23	56.3	73.6	48.7
10:00 AM	10/11/23	54.8	74.9	49.2
11:00 AM	10/11/23	55.6	73.6	50.0
12:00 PM	10/11/23	53.8	67.6	49.6

Source: Compiled by LSA Associates, Inc. (2023).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum measured sound level



Noise Measurement Survey – 24 HR

Project Number: CCP2201.04
Project Name: 5665 Plaza Drive

Test Personnel: Kevin Nguyendo
Equipment: Spark 706RC (SN:206)

Site Number: LT-3 Date: 10/10/23

Time: From 1:00 p.m. To 1:00 p.m.

Site Location: 10880 Walker Street, Cypress, CA. Along the eastern property line of an office Building on a tree.

Primary Noise Sources: Traffic on Walker Street. Parking lot activity.

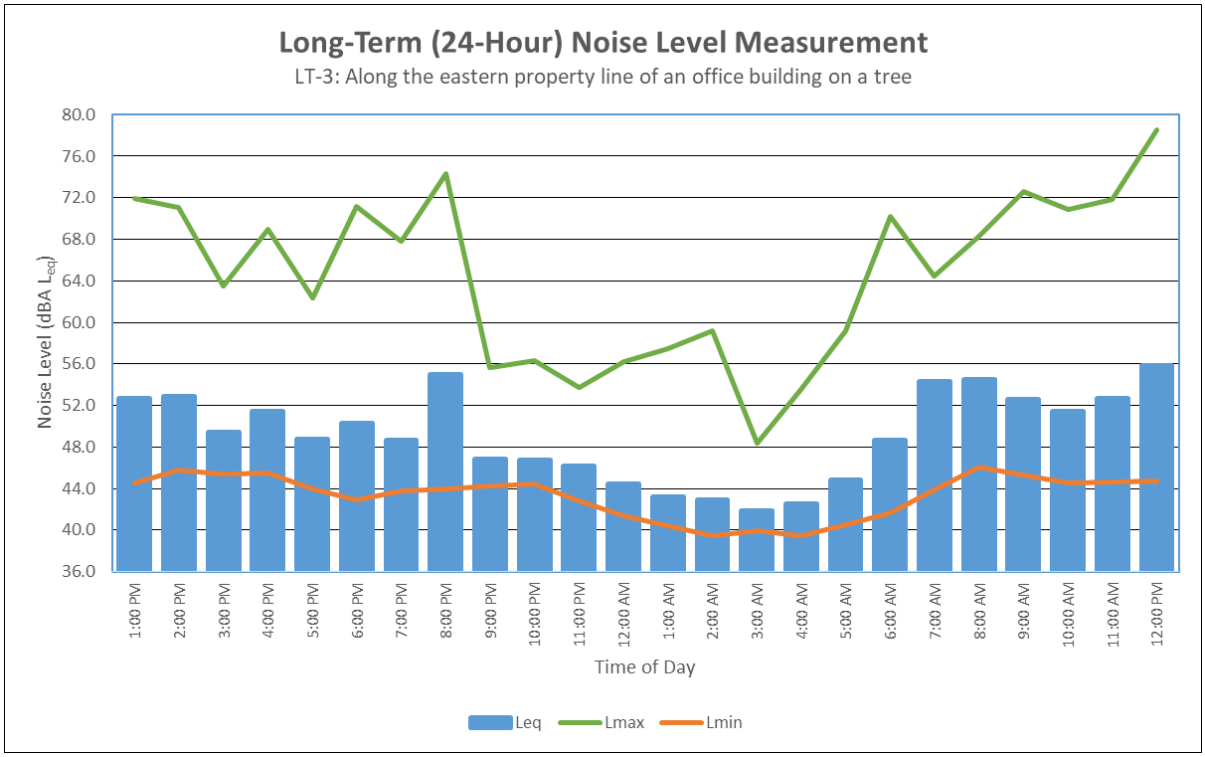
Comments:

Photo:

Long-Term (24-Hour) Noise Level Measurement Results at LT-3

Start Time	Date	Noise Level (dBA)		
		L_{eq}	L_{max}	L_{min}
1:00 PM	10/10/23	52.7	71.9	44.5
2:00 PM	10/10/23	52.8	71.1	45.8
3:00 PM	10/10/23	49.5	63.5	45.4
4:00 PM	10/10/23	51.4	69.0	45.5
5:00 PM	10/10/23	48.8	62.3	44.0
6:00 PM	10/10/23	50.3	71.2	42.9
7:00 PM	10/10/23	48.7	67.8	43.8
8:00 PM	10/10/23	55.0	74.3	44.0
9:00 PM	10/10/23	46.9	55.6	44.2
10:00 PM	10/10/23	46.7	56.3	44.4
11:00 PM	10/10/23	46.1	53.7	42.8
12:00 AM	10/11/23	44.4	56.2	41.4
1:00 AM	10/11/23	43.2	57.5	40.4
2:00 AM	10/11/23	42.9	59.2	39.5
3:00 AM	10/11/23	41.8	48.4	39.9
4:00 AM	10/11/23	42.5	53.5	39.5
5:00 AM	10/11/23	44.8	59.2	40.5
6:00 AM	10/11/23	48.6	70.2	41.7
7:00 AM	10/11/23	54.3	64.5	43.9
8:00 AM	10/11/23	54.5	68.3	46.1
9:00 AM	10/11/23	52.6	72.6	45.3
10:00 AM	10/11/23	51.4	70.9	44.5
11:00 AM	10/11/23	52.7	71.8	44.6
12:00 PM	10/11/23	55.8	78.5	44.7

Source: Compiled by LSA Associates, Inc. (2023).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum measured sound level



Construction Calculations

Phase: Demolition

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Noise Level (dBA) Leq
Concrete Saw	1	90	20	50	0.5	90	83
Excavator	3	81	40	50	0.5	81	82
Dozer	2	82	40	50	0.5	82	81
					Combined at 50 feet	**91**	**87**

Phase: Site Preparation

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Noise Level (dBA) Leq
Dozer	3	82	40	50	0.5	82	83
Tractor	4	84	40	50	0.5	84	86
					Combined at 50 feet	**86**	**88**
					Combined at Receptor 1300 feet	**58**	**59**

Phase: Grading

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Noise Level (dBA) Leq
Excavator	2	81	40	50	0.5	81	80
Grader	1	85	40	50	0.5	85	81
Dozer	1	82	40	50	0.5	82	78
Scraper	2	84	40	50	0.5	84	83
Tractor	2	84	40	50	0.5	84	83
					Combined at 50 feet	**90**	**88**

Phase:Building Construstion

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Noise Level (dBA) Leq
Crane	1	81	16	50	0.5	81	73
Man Lift	3	75	20	50	0.5	75	73
Generator	1	81	50	50	0.5	81	78
Tractor	3	84	40	50	0.5	84	85
Welder / Torch	1	74	40	50	0.5	74	70
					Combined at 50 feet	**87**	**86**

Phase:Paving

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Noise Level (dBA) Leq
Paver	2	77	50	50	0.5	77	77
All Other Equipment > 5 HP	2	85	50	50	0.5	85	85
Roller	2	80	20	50	0.5	80	76
					Combined at 50 feet	**87**	**86**

Phase:Architectural Coating

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Noise Level (dBA) Leq
Compressor (air)	1	78	40	50	0.5	78	74
					Combined at 50 feet	**78**	**74**

Sources: RCNM

[1]- Percentage of time that a piece of equipment is operating at full power.
dBA – A-weighted Decibels
Lmax- Maximum Level
Leq- Equivalent Level

DDC 10 Ton Weight 60 ft Drop

Distance (ft)	PPV (in/s)
42	1.52
45	1.8
47	1.5
51	1
53	0.7
57	0.42
60	0.67
63	0.62
67	0.79
69	0.49
81	0.4
93	0.35
105	0.3