Baseline Noise Measurements

Site Number: 1			
Recorded By: Lindsay Liegler			
Job Number: 2017-276.009			
Date: 2/11/2022 – 2/15/2022			
Time: 11:04 a.m. – 5:46 a.m.			
Location: Near the southern portion of the Project Site approximately 50 feet from Elden Way.			
Source of Peak Noise: Landscaping/ gardening (leaf blowers)			
Noise Data			
LA_{eq} (dB)	**L_{min} (dB)**	**L_{max} (dB)**	**CNEL**
45.7	24.1	83.1	49.4

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Larson Davis**	**LxT SE**	**0005120**	**11/29/2021**	
	Microphone	**Larson Davis**	**377B02**	**334361**	**11/30/2021**	
	Preamp	**Larson Davis**	**PRMLxT1L**	**042852**	**11/30/2021**	
	Calibrator	**Larson Davis**	**CAL200**	**14105**	**11/10/2021**	

Weather Data			
Est.	**Duration:** 90 hours		**Sky:** Clear
	Note: dBA Offset = -0.01		**Sensor Height (ft):** 3.5
	Wind Ave Speed (mph)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (hPa)**
	5	75	30.03

Photo of Measurement Location

Measurement Report

Report Summary

Meter's File Name	LxT_Data.098.s	Computer's File Name	LxT_0006133-20220211 110412-LxT_Data.098.ldbin
Meter	LxT1 0006133		
Firmware	2.404		
User		Location	
Job Description			
Note			

Start Time	2022-02-11 11:04:12	Duration	90:42:12.0		
End Time	2022-02-15 05:46:24	Run Time	90:42:12.0	Pause Time	0:00:00.0

Results

Overall Metrics

LA_{eq}	45.7 dB		
LAE	100.9 dB	SEA	130.2 dB
EA	1.4 mPa²h		
EA8	120.1 µPa²h		
EA40	600.7 µPa²h		
LZS_{peak}	120.2 dB	2022-02-11 11:04:59	
LAS_{max}	83.1 dB	2022-02-11 11:04:59	
LAS_{min}	28.1 dB	2022-02-15 01:48:09	
LA_{eq}	45.7 dB		
LC_{eq}	59.6 dB	LC_{eq} - LA_{eq}	13.8 dB
LAI_{eq}	50.4 dB	LAI_{eq} - LA_{eq}	4.7 dB

Exceedances	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight	
	48.9 dB	47.3 dB	0.0 dB	
	LDEN	LDay	LEve	LNight
	49.4 dB	47.7 dB	45.2 dB	40.7 dB

Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	45.7 dB		--- dB		--- dB	
$Ls_{(max)}$	83.1 dB	2022-02-11 11:04:59	--- dB		--- dB	
$LS_{(min)}$	28.1 dB	2022-02-15 01:48:09	--- dB		--- dB	
$L_{Peak(max)}$	--- dB		--- dB		120.2 dB	2022-02-11 11:04:59

Overloads	Count	Duration
	0	0:00:00.0

Statistics

LAS 5.0	48.6 dB
LAS 10.0	45.9 dB
LAS 33.3	42.4 dB
LAS 50.0	40.7 dB
LAS 66.6	38.8 dB
LAS 90.0	35.2 dB

TRAFFIC NOISE MODELING OUTPUTS

TRAFFIC NOISE LEVELS

Project Number: 2017-276.009
Project Name: VRG

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): Existing
Source of Traffic Volumes: KOA 2022
Community Noise Descriptor: L_{dn}: ____ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hour dB(A) L_{eq}	24-Hour dB(A) CNEL
Analysis Condition													
Analysis Condition													
North Beverly Drive													
North of Lexington Road	Residential	2	0	0	5,868	35	100	0	0	1.8%	0.7%	0.0	59.4
South of Lexington Road	Residential	2	0	0	4,203	35	100	0	0	1.8%	0.7%	0.0	58.0
North Crescent Drive													
South of Lexington Road	Residential	2	0	0	783	35	100	0	0	1.8%	0.7%	0.0	50.7
Between Lexington Road and Elden Way	Residential	2	0	0	103	35	100	0	0	1.8%	0.7%	0.0	41.9
Elden Way													
North of North Crescent Drive	Residential	2	0	0	54	35	100	0	0	1.8%	0.7%	0.0	39.1
Lexington Road													
East of North Beverly Drive	Residential	2	0	0	1,206	35	100	0	0	1.8%	0.7%	0.0	52.5
Between North Beverly Drive and Crescent D	Residential	2	0	0	1,939	35	100	0	0	1.8%	0.7%	0.0	54.6
Between Crescent Drive and Oxford Way	Residential	2	0	0	2,497	35	100	0	0	1.8%	0.7%	0.0	55.7
Between Oxford Way and Hartford Way	Residential	2	0	0	2,466	35	100	0	0	1.8%	0.7%	0.0	55.7
Between Hartford Way and Benedict Canyon	Residential	2	0	0	1,179	35	100	0	0	1.8%	0.7%	0.0	52.5
West of Benedict Canyon Drive	Residential	2	0	0	1,638	35	100	0	0	1.8%	0.7%	0.0	53.9
Oxford Way													
South of Lexington Road	Residential	2	0	0	90	35	100	0	0	1.8%	0.7%	0.0	41.3
Hartford Way													
South of Lexington Road	Residential	2	0	0	108	35	100	0	0	1.8%	0.7%	0.0	42.1
Between Lexington Road and Cove Way	Residential	2	0	0	1,683	35	100	0	0	1.8%	0.7%	0.0	54.0
Between Cove Way and Benedict Canyon Ro	Residential	2	0	0	702	35	100	0	0	1.8%	0.7%	0.0	50.2
West of Benedict Canyon Road	Residential	2	0	0	288	35	100	0	0	1.8%	0.7%	0.0	46.3
Cove Way													
North of Hartford Way	Residential	2	0	0	2,349	35	100	0	0	1.8%	0.7%	0.0	55.4
Benedict Canyon Drive													
South of Lexington Road	Residential	2	0	0	3,420	35	100	0	0	1.8%	0.7%	0.0	57.1
Between Lexington Road and North Roxbury	Residential	2	0	0	5,436	35	100	0	0	1.8%	0.7%	0.0	59.1
North of Hartford Way	Residential	2	0	0	8,793	35	100	0	0	1.8%	0.7%	0.0	61.2

TRAFFIC NOISE LEVELS

Project Number: 2017-276.009
Project Name: VRG

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): Existing + Project
Source of Traffic Volumes: KOA 2022
Community Noise Descriptor: L_{dn}: ____ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hour dB(A) L_{eq}	24-Hour dB(A) CNEL
Analysis Condition													
Analysis Condition													
North Beverly Drive													
North of Lexington Road	Residential	2	0	0	5,886	35	100	0	0	1.8%	0.7%	0.0	59.4
South of Lexington Road	Residential	2	0	0	4,266	35	100	0	0	1.8%	0.7%	0.0	58.0
North Crescent Drive													
South of Lexington Road	Residential	2	0	0	801	35	100	0	0	1.8%	0.7%	0.0	50.8
Between Lexington Road and Elden Way	Residential	2	0	0	323	35	100	0	0	1.8%	0.7%	0.0	46.8
Elden Way													
North of North Crescent Drive	Residential	2	0	0	252	35	100	0	0	1.8%	0.7%	0.0	45.7
Lexington Road													
East of North Beverly Drive	Residential	2	0	0	1,224	35	100	0	0	1.8%	0.7%	0.0	52.6
Between North Beverly Drive and Crescent D	Residential	2	0	0	2,006	35	100	0	0	1.8%	0.7%	0.0	54.8
Between Crescent Drive and Oxford Way	Residential	2	0	0	2,497	35	100	0	0	1.8%	0.7%	0.0	55.7
Between Oxford Way and Hartford Way	Residential	2	0	0	2,556	35	100	0	0	1.8%	0.7%	0.0	55.8
Between Hartford Way and Benedict Canyon	Residential	2	0	0	1,260	35	100	0	0	1.8%	0.7%	0.0	52.7
West of Benedict Canyon Drive	Residential	2	0	0	1,638	35	100	0	0	1.8%	0.7%	0.0	53.9
Oxford Way													
South of Lexington Road	Residential	2	0	0	90	35	100	0	0	1.8%	0.7%	0.0	41.3
Hartford Way													
South of Lexington Road	Residential	2	0	0	108	35	100	0	0	1.8%	0.7%	0.0	42.1
Between Lexington Road and Cove Way	Residential	2	0	0	1,692	35	100	0	0	1.8%	0.7%	0.0	54.0
Between Cove Way and Benedict Canyon Ro	Residential	2	0	0	711	35	100	0	0	1.8%	0.7%	0.0	50.3
West of Benedict Canyon Road	Residential	2	0	0	288	35	100	0	0	1.8%	0.7%	0.0	46.3
Cove Way													
North of Hartford Way	Residential	2	0	0	2,358	35	100	0	0	1.8%	0.7%	0.0	55.5
Benedict Canyon Drive													
South of Lexington Road	Residential	2	0	0	3,510	35	100	0	0	1.8%	0.7%	0.0	57.2
Between Lexington Road and North Roxbury	Residential	2	0	0	5,436	35	100	0	0	1.8%	0.7%	0.0	59.1
North of Hartford Way	Residential	2	0	0	8,802	35	100	0	0	1.8%	0.7%	0.0	61.2

ONSITE NOISE MODELING OUTPUTS

SoundPLAN
Output Source Information

Number	Reciever Name	Location	Level at Ground Floor
1	Residential	House 1025 (south of Project Site)	19.9 dBA
2	Residential	House 1006 (south of Project Site)	27.9 dBA
3	Residential	House 1005 (south of Project Site)	27.1 dBA
4	Residential	House 1024 (south of Project Site)	37.4 dBA
5	Residential	House 1027 (west of Project Site)	34.7 dBA
6	Residential	House 1031 (west of Project Site)	33.1 dBA
7	Residential	House 1032 (west of Project Site)	30.4 dBA
8	Residential	House 1034 (north of Project Site)	30.8 dBA
9	Residential	House 1036 (north of Project Site)	31.5 dBA
10	Residential	House 1055 (north of Project Site)	35.1 dBA
11	Residential	House 1045 (north of Project Site)	41.3 dBA
12	Residential	House 1035 (north of Project Site)	31.2 dBA
13	Residential	House 1028 (northeast of Project Site)	16.1 dBA
14	Residential	House 1019 (east of Project Site)	14.7 dBA
15	Residential	House 1017 (southeast of Project Site)	14.5 dBA
16	Residential	House 1015 (southeast of Project Site)	13.6 dBA

Number	Noise Source Information	Citation	Level at Source
1	Crowd Noise	M.J. Hayne, et al, Prediction of Crowd Noise, Acoustics, November 2006.	62.0 dBA

SoundPLAN
Output Source Information

Number	Reciever Name	Location	Level at Ground Floor
1	Residential	House 1025 (south of Project Site)	52.4 dBA
2	Residential	House 1006 (south of Project Site)	58 dBA
3	Residential	House 1005 (south of Project Site)	57.5 dBA
4	Residential	House 1024 (south of Project Site)	52.2 dBA
5	Residential	House 1027 (west of Project Site)	66.1 dBA
6	Residential	House 1031 (west of Project Site)	69.4 dBA
7	Residential	House 1032 (west of Project Site)	63.4 dBA
8	Residential	House 1034 (north of Project Site)	59.7 dBA
9	Residential	House 1036 (north of Project Site)	61.6 dBA
10	Residential	House 1055 (north of Project Site)	66.5 dBA
11	Residential	House 1045 (north of Project Site)	72.1 dBA
12	Residential	House 1035 (north of Project Site)	55.4 dBA
13	Residential	House 1028 (northeast of Project Site)	46.8 dBA
14	Residential	House 1019 (east of Project Site)	43.3 dBA
15	Residential	House 1017 (southeast of Project Site)	46 dBA
16	Residential	House 1015 (southeast of Project Site)	47.5 dBA

Number	Noise Source Information	Citation	Level at Source
1	High Intensity Amplified Music	ECORP Consultinjg, Inc. Refrence Noise Measurment (Rock/ Reggae Concert)	108.1 dBA
2	Crowd Noise	M.J. Hayne, et al, Prediction of Crowd Noise, Acoustics, November 2006.	62.0 dBA

SoundPLAN
Output Source Information

Number	Reciever Name	Location	Level at Ground Floor
1	Residential	House 1025 (south of Project Site)	45.8 dBA
2	Residential	House 1006 (south of Project Site)	45.8 dBA
3	Residential	House 1005 (south of Project Site)	51 dBA
4	Residential	House 1024 (south of Project Site)	46.1 dBA
5	Residential	House 1027 (west of Project Site)	59.5 dBA
6	Residential	House 1031 (west of Project Site)	62.9 dBA
7	Residential	House 1032 (west of Project Site)	56.8 dBA
8	Residential	House 1034 (north of Project Site)	53.1 dBA
9	Residential	House 1036 (north of Project Site)	55.0 dBA
10	Residential	House 1055 (north of Project Site)	59.9 dBA
11	Residential	House 1045 (north of Project Site)	65.5 dBA
12	Residential	House 1035 (north of Project Site)	48.9 dBA
13	Residential	House 1028 (northeast of Project Site)	40.2 dBA
14	Residential	House 1019 (east of Project Site)	36.7 dBA
15	Residential	House 1017 (southeast of Project Site)	39.4 dBA
16	Residential	House 1015 (southeast of Project Site)	40.9 dBA

Number	Noise Source Information	Citation	Level at Source
1	Moderate Intensity Amplified Music	ECORP Consultinjg, Inc. Refrence Noise Measurment (Small Country Band)	101.5 dBA
2	Crowd Noise	M.J. Hayne, et al, Prediction of Crowd Noise, Acoustics, November 2006.	62.0 dBA