

Appendix H:
Noise Supporting Information

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H.1 - Compiled Noise Data

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Summary

Filename LxT_Data.421
 Serial Number 4228
 Model SoundTrack LxT®
 Firmware Version 2.206
 User
 Location
 Job Description
 Note
 Measurement Description
 Start 10/02/2019 11:43:09
 Stop 10/03/2019 13:44:36
Duration 1 Day 02:01:27.2
 Run Time 1 Day 02:01:27.2
 Pause 0:00:00.0

Pre Calibration 10/02/2019 11:39:00
 Post Calibration None
 Calibration Deviation ---

Overall Settings

RMS Weight A Weighting
 Peak Weight A Weighting
 Detector Slow
 Preamp PRMLxT2B
 Microphone Correction Off
 Integration Method Exponential
 Overload 145.7 dB

	A	C	Z
Under Range Peak	101.8	98.8	103.8 dB
Under Range Limit	37.9	35.9	43.9 dB
Noise Floor	25.3	25.8	33.1 dB

Results

LASeq 66.7 dB
 LA SE 116.5 dB
 EAS 49.239 mPa²h
 EAS8 15.136 mPa²h
 EAS40 75.682 mPa²h
 LApeak (max) 10/02/2019 12:32:47 114.3 dB
 LASmax 10/02/2019 12:32:47 103.5 dB
 LASmin 10/02/2019 23:39:00 **34.3** dB
 SEA -99.9 dB

LAS > 85.0 dB (Exceedence Counts / Duration)	35	419.5 s
LAS > 115.0 dB (Exceedence Counts / Duration)	0	0.0 s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0	0.0 s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0	0.0 s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0	0.0 s

Community Noise

	Ldn	LDay 07:00-22:00	LNight 22:00-07:00	Lden	LDay 07:00-19:00	LEvening 19:00-22:00	LNight 22:00-07:00
	72.8	67.0	66.3	72.9	67.5	63.7	66.3
LCSeq	72.9 dB						
LASeq	66.7 dB						
LCSeq - LASeq	6.2 dB						
LAleq	69.2 dB						
LAeq	66.7 dB						
LAleq - LAeq	2.5 dB						
# Overloads	0						
Overload Duration	0.0 s						

Dose Settings

	OSHA-1	OSHA-2
Dose Name		
Exch. Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results

Dose	0.48	1.51 %
Projected Dose	0.15	0.46 %
TWA (Projected)	42.9	51.2 dB
TWA (t)	51.4	59.7 dB
Lep (t)	71.9	71.9 dB

Statistics

LAS5.00	56.8 dB
LAS10.00	52.9 dB
LAS33.30	47.9 dB
LAS50.00	45.9 dB
LAS75.00	42.6 dB
LAS90.00	39.6 dB

TABLE Existing-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/18/2020
ROADWAY SEGMENT: Giant Highway - north of Giant Road
NOTES: Richmond Country Club Project - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6700 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.45

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
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0.0	0.0	81.3	174.9

TABLE Existing-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/18/2020
ROADWAY SEGMENT: Giant Road - Richmond Parkway Ramp to Giant Highway
NOTES: Richmond Country Club Project - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7800 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
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0.0	0.0	90.0	193.5

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