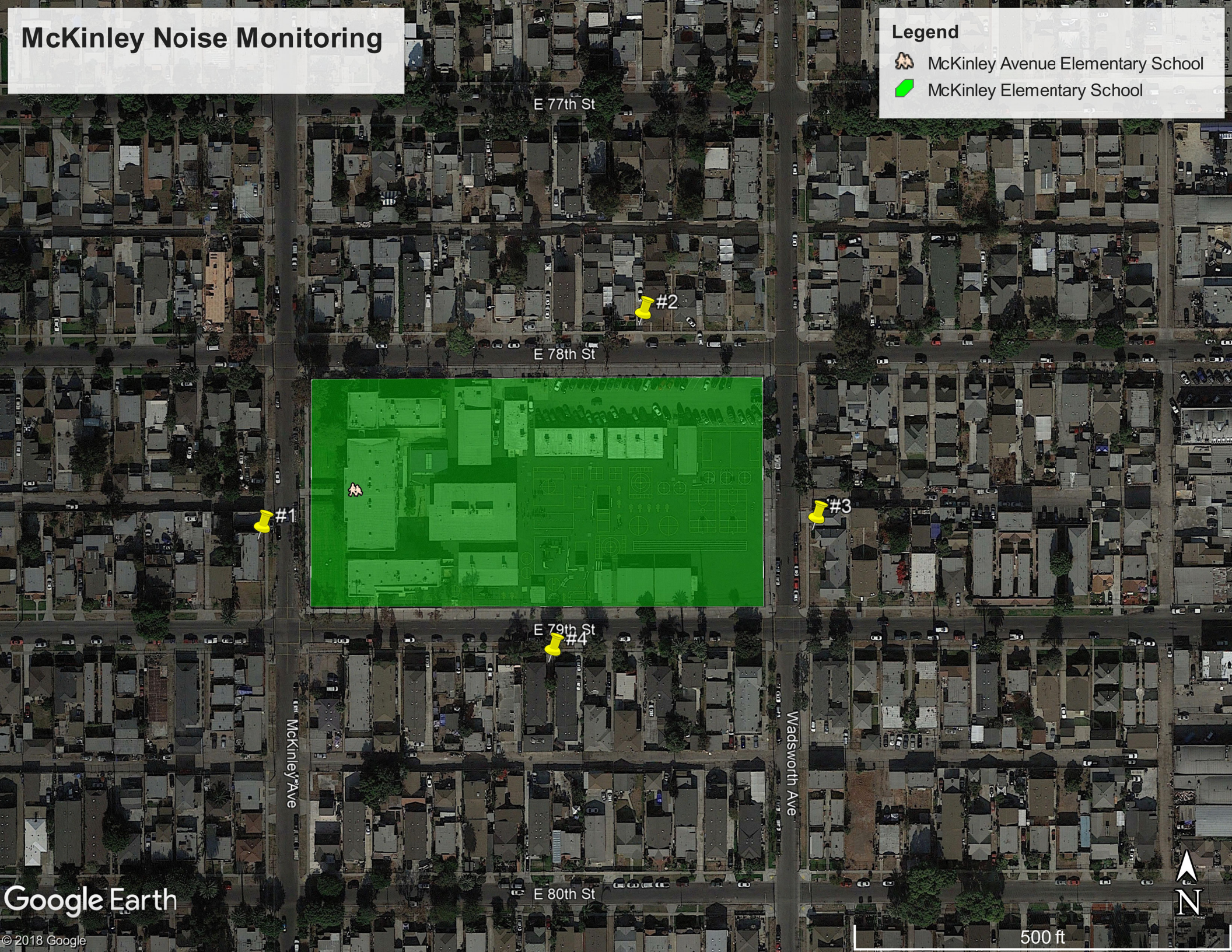
McKinley Noise Monitoring
Legend
McKinley Avenue Elementary School
McKinley Elementary School
E 77th St
E 78th St
E 79th St
E 80th St
McKinley Ave
Wadsworth Ave
#1
#2
#3
#4
N
500 ft
Google Earth
© 2018 Google

Summary

File Name on Meter	LxT_Data.005
File Name on PC	SLM_0005667_LxT_Data_005.01.ldbin
Serial Number	0005667
Model	SoundTrack LxT®
Firmware Version	2.302
User	ISI
Location	#1
Job Description	McKinley ES
Note	

Measurement

Description	
Start	2018-11-07 15:17:28
Stop	2018-11-07 15:32:28
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	2018-11-01 09:59:25
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Overload	144.2 dB

	A	C	Z
Under Range Peak	100.5	97.5	**102.5** dB
Under Range Limit	**49.5**	47.5	55.5 dB
Noise Floor	36.4	37.0	44.6 dB

Results

L_{Aeq}	62.8 dB	
LAE	92.3 dB	
EA	189.309 µPa²h	
EA8	6.058 mPa²h	
EA40	30.289 mPa²h	
$LZ_{peak\ (max)}$	2018-11-07 15:21:57	99.7 dB
LAS_{max}	2018-11-07 15:31:59	77.5 dB
LAS_{min}	2018-11-07 15:22:48	51.3 dB
SEA	-99.9 dB	
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s
LC_{eq}	71.4 dB	
LA_{eq}	62.8 dB	
LC_{eq} - LA_{eq}	8.7 dB	
LAI_{eq}	65.1 dB	
LA_{eq}	62.8 dB	
LAI_{eq} - LA_{eq}	2.3 dB	

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
L_{eq}	62.8		71.4			
$L_{S(max)}$	77.5	2018/11/07 15:31:59				
$L_{S(min)}$	51.3	2018/11/07 15:22:48				
$L_{Peak(max)}$					99.7	2018/11/07 15:21:57

# Overloads	0
Overload Duration	0.0 s

# OBA Overloads	0	
OBA Overload Duration	0.0	s

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

Results			
Dose	-99.9	-99.9	%
Projected Dose	-99.9	-99.9	%
TWA (Projected)	-99.9	-99.9	dB
TWA (t)	-99.9	-99.9	dB
Lep (t)	47.7	47.7	dB

Statistics		
LAS5.00	70.5	dB
LAS10.00	66.5	dB
LAS33.30	57.4	dB
LAS50.00	55.7	dB
LAS66.60	54.2	dB
LAS90.00	52.7	dB

Summary

File Name on Meter	LxT_Data.006
File Name on PC	SLM_0005667_LxT_Data_006.01.ldbin
Serial Number	0005667
Model	SoundTrack LxT®
Firmware Version	2.302
User	ISI
Location	#2
Job Description	McKinley ES
Note	

Measurement

Description	
Start	2018-11-07 15:37:23
Stop	2018-11-07 15:52:23
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	2018-11-01 09:59:25
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Overload	144.2 dB

	A	C	Z	
Under Range Peak	100.5	97.5	**102.5**	dB
Under Range Limit	**49.5**	47.5	55.5	dB
Noise Floor	36.4	37.0	44.6	dB

Results

LAeq	61.8	dB	
LAE	91.3	dB	
EA	150.717	µPa²h	
EA8	4.823	mPa²h	
EA40	24.115	mPa²h	
LZpeak (max)	2018-11-07 15:49:18	102.3	dB
LASmax	2018-11-07 15:46:12	76.2	dB
LASmin	2018-11-07 15:50:57	46.7	dB
SEA	-99.9	dB	

LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

LCeq	73.0	dB
LAeq	61.8	dB
LCeq - LAeq	11.2	dB
LAleq	65.0	dB
LAeq	61.8	dB
LAleq - LAeq	3.2	dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	61.8		73.0			
LS(max)	76.2	2018/11/07 15:46:12				
LS(min)	46.7	2018/11/07 15:50:57				
LPeak(max)					102.3	2018/11/07 15:49:18

# Overloads	0
Overload Duration	0.0 s

# OBA Overloads	0	
OBA Overload Duration	0.0	s

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

Results			
Dose	-99.9	-99.9	%
Projected Dose	-99.9	-99.9	%
TWA (Projected)	-99.9	-99.9	dB
TWA (t)	-99.9	-99.9	dB
Lep (t)	46.7	46.7	dB

Statistics		
LAS5.00	69.2	dB
LAS10.00	66.0	dB
LAS33.30	57.0	dB
LAS50.00	54.2	dB
LAS66.60	52.1	dB
LAS90.00	49.4	dB

Summary

File Name on Meter	LxT_Data.007
File Name on PC	SLM_0005667_LxT_Data_007.01.ldbin
Serial Number	0005667
Model	SoundTrack LxT®
Firmware Version	2.302
User	ISI
Location	#3
Job Description	McKinley ES
Note	

Measurement

Description	
Start	2018-11-07 15:55:39
Stop	2018-11-07 16:10:39
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	2018-11-01 09:59:25
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Overload	144.2 dB

	A	**C**	**Z**	
Under Range Peak	100.5	97.5	**102.5**	dB
Under Range Limit	**49.5**	47.5	55.5	dB
Noise Floor	36.4	37.0	44.6	dB

Results

L_{Aeq}	62.3 dB	
LAE	91.8 dB	
EA	169.479 µPa²h	
EA8	5.423 mPa²h	
EA40	27.117 mPa²h	
$LZ_{peak\ (max)}$	2018-11-07 16:05:54	100.1 dB
LAS_{max}	2018-11-07 16:05:55	75.2 dB
LAS_{min}	2018-11-07 16:05:13	51.5 dB
SEA	-99.9 dB	

LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

LC_{eq}	72.0 dB
LA_{eq}	62.3 dB
LC_{eq} - LA_{eq}	9.7 dB
LAI_{eq}	64.9 dB
LA_{eq}	62.3 dB
LAI_{eq} - LA_{eq}	2.6 dB

	A		**C**		**Z**	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
L_{eq}	62.3		72.0			
$L_{S(max)}$	75.2	2018/11/07 16:05:55				
$L_{S(min)}$	51.5	2018/11/07 16:05:13				
$L_{Peak(max)}$					100.1	2018/11/07 16:05:54

# Overloads	0
Overload Duration	0.0 s

# OBA Overloads	0	
OBA Overload Duration	0.0	s

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

Results			
Dose	-99.9	-99.9	%
Projected Dose	-99.9	-99.9	%
TWA (Projected)	-99.9	-99.9	dB
TWA (t)	-99.9	-99.9	dB
Lep (t)	47.2	47.2	dB

Statistics		
LAS5.00	68.2	dB
LAS10.00	66.4	dB
LAS33.30	60.6	dB
LAS50.00	58.2	dB
LAS66.60	56.5	dB
LAS90.00	54.3	dB

Summary

File Name on Meter	LxT_Data.008
File Name on PC	SLM_0005667_LxT_Data_008.00.ldbin
Serial Number	0005667
Model	SoundTrack LxT®
Firmware Version	2.302
User	ISI
Location	#4
Job Description	McKinley ES
Note	

Measurement

Description	
Start	2018-11-07 16:14:24
Stop	2018-11-07 16:29:24
Duration	00:15:00.0
Run Time	00:14:43.2
Pause	00:00:16.8
Pre Calibration	2018-11-01 09:59:25
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Overload	144.2 dB

	A	**C**	**Z**	
Under Range Peak	100.5	97.5	**102.5**	dB
Under Range Limit	**49.5**	47.5	55.5	dB
Noise Floor	36.4	37.0	44.6	dB

Results

L_{Aeq}	65.2 dB	
LAE	94.6 dB	
EA	322.023 µPa²h	
EA8	10.501 mPa²h	
EA40	52.504 mPa²h	
$LZ_{peak\ (max)}$	2018-11-07 16:21:18	99.5 dB
LAS_{max}	2018-11-07 16:29:16	75.2 dB
LAS_{min}	2018-11-07 16:17:22	52.6 dB
SEA	-99.9 dB	

LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

LC_{eq}	73.7 dB
LA_{eq}	65.2 dB
LC_{eq} - LA_{eq}	8.5 dB
LAI_{eq}	67.0 dB
LA_{eq}	65.2 dB
LAI_{eq} - LA_{eq}	1.9 dB

	A		**C**		**Z**	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
L_{eq}	65.2		73.7			
$L_{S(max)}$	75.2	2018/11/07 16:29:16				
$L_{S(min)}$	52.6	2018/11/07 16:17:22				
$L_{Peak(max)}$					99.5	2018/11/07 16:21:18

# Overloads	0
Overload Duration	0.0 s

# OBA Overloads	0	
OBA Overload Duration	0.0	s

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

Results			
Dose	-99.9	-99.9	%
Projected Dose	-99.9	-99.9	%
TWA (Projected)	-99.9	-99.9	dB
TWA (t)	-99.9	-99.9	dB
Lep (t)	50.0	50.0	dB

Statistics		
LAS5.00	70.5	dB
LAS10.00	68.8	dB
LAS33.30	65.0	dB
LAS50.00	63.1	dB
LAS66.60	60.5	dB
LAS90.00	55.1	dB

McKinley ES Modernization - Construction Noise - Unmitigated

Reference Noise Distance 50

Reference Noise Level 90

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Construction Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Residences to the East	70	6	81.1	62.3	81.1	18.8
Residences to the North	70	6	81.1	61.8	81.1	19.3
Residences to the South	75	6	80.5	65.2	80.6	15.4
Residences to the West	100	6	78.0	62.8	78.1	15.3
The Salvation Army Childcare	750	9	57.5	61.8	63.2	1.4
St Reed Missionary Baptist Church	800	9	56.9	62.8	63.8	1.0

A 6 dBA attenuation was given for hard ground surfuce, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

McKinley ES Modernization - Construction Noise - Mitigated

Reference Noise Distance 50

Reference Noise Level 90

Sensitive Receptor	Distance (feet)	Mitigation Factors	Attenuation Factors	Maximum Construction Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Residences to the East	70	17	6	64.1	62.3	66.3	4.0
Residences to the North	70	17	6	64.1	61.8	66.1	4.3
Residences to the South	75	17	6	63.5	65.2	67.4	2.2
Residences to the West	100	17	6	61.0	62.8	65.0	2.2
The Salvation Army Childcare	750	17	9	40.5	61.8	61.8	0.0
St Reed Missionary Baptist Church	800	17	9	52.0	62.8	63.1	0.3

A 3 dBA reduction was given for mufflers.

A 14 dBA reduction was given for noise attenuating barrier + acoustical blanket.

A 6 dBA attenuation was given for hard ground surfuce, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

McKinley ES — Residences to the East

Ref= Reference vibration level (PPV)
RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV
Ref= 0.089 Based on type of equipment
RefD= 25
D= 70 Distance from equipment to sensitive receptor
Equip= 0.019

Annoyance VdB
Ref= 87 Based on type of equipment
RefD= 25
D= 70 Distance from equipment to sensitive receptor
Equip= 74

Peak demolition vibration based on utilizing a large bulldozer.
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

McKinley ES — Residences to the North

Ref= Reference vibration level (PPV)
RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV
Ref= 0.089 Based on type of equipment
RefD= 25
D= 70 Distance from equipment to sensitive receptor
Equip= 0.019

Annoyance VdB
Ref= 87 Based on type of equipment
RefD= 25
D= 70 Distance from equipment to sensitive receptor
Equip= 74

Peak demolition vibration based on utilizing a large bulldozer.
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

McKinley ES — Residences to the South

Ref= Reference vibration level (PPV)
RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV
Ref= 0.089 Based on type of equipment
RefD= 25
D= 75 Distance from equipment to sensitive receptor
Equip= 0.017

Annoyance VdB
Ref= 87 Based on type of equipment
RefD= 25
D= 75 Distance from equipment to sensitive receptor
Equip= 73

Peak demolition vibration based on utilizing a large bulldozer.
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

McKinley ES — Residences to the West

Ref= Reference vibration level (PPV)
RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV
Ref= 0.089 Based on type of equipment
RefD= 25
D= 100 Distance from equipment to sensitive receptor
Equip= 0.011

Annoyance VdB
Ref= 87 Based on type of equipment
RefD= 25
D= 100 Distance from equipment to sensitive receptor
Equip= 69

Peak demolition vibration based on utilizing a large bulldozer.
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

McKinley ES — The Salvation Army Childcare

Ref= Reference vibration level (PPV)
RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV
Ref= 0.089 Based on type of equipment
RefD= 25
D= 750 Distance from equipment to sensitive receptor
Equip= 0.001

Annoyance VdB
Ref= 87 Based on type of equipment
RefD= 25
D= 750 Distance from equipment to sensitive receptor
Equip= 43

Peak demolition vibration based on utilizing a large bulldozer.
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

McKinley ES — St Reed Missionary Baptist Church

Ref= Reference vibration level (PPV)
RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV
Ref= 0.089 Based on type of equipment
RefD= 25
D= 800 Distance from equipment to sensitive receptor
Equip= 0.000

Annoyance VdB
Ref= 87 Based on type of equipment
RefD= 25
D= 800 Distance from equipment to sensitive receptor
Equip= 42

Peak demolition vibration based on utilizing a large bulldozer.
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.