

Appendix G

Noise Data

FIELD NOISE MEASUREMENT DATA

PROJECT: Alpine Park

PROJ. # 00098.20

SITE IDENTIFICATION: ST1

OBSERVER(S): JCR

ADDRESS: Ned 2501 Engelmann Oak Ln

START DATE / TIME: 3/31/20 9:45 AM

END DATE / TIME: 3/31/20 10:05 AM

METEOROLOGICAL CONDITIONS:

TEMP: 62 °F HUMIDITY: 70.0 %R.H.

WINDSPEED: 0-1 MPH DIR: N NE E SE

SKY: SUNNY CLEAR OVCST PRTLY CLOUDY FOG

WIND: CALM LIGHT MODERATE VARIABLE

W NW STEADY GUSTY

OTHER:

ACOUSTIC MEASUREMENTS:

INSTRUMENT: LP LXT

TYPE: G2

SERIAL #: 4005

CALIBRATOR: CAL 200

SERIAL #: 2910

CALIBRATION CHECK, BEFORE: 114.0 AFTER: 113.98 WINDSCREEN X

SETTINGS: A-WEIGHTED

SLOW

FAST

FRONTAL

RANDOM

ANSI

OTHER:

FILE / MEAS #	START TIME	END TIME	L _{eq}	max	1.67	8.33	25	50	90	99	min
1814	9:45 AM	10:05 AM	46.5	57.3	55.4	51.5	46.6	41.7	34.7	31.7	29.6

COMMENTS:

NOISE SOURCE INFO:

PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:

ROADWAY TYPE:

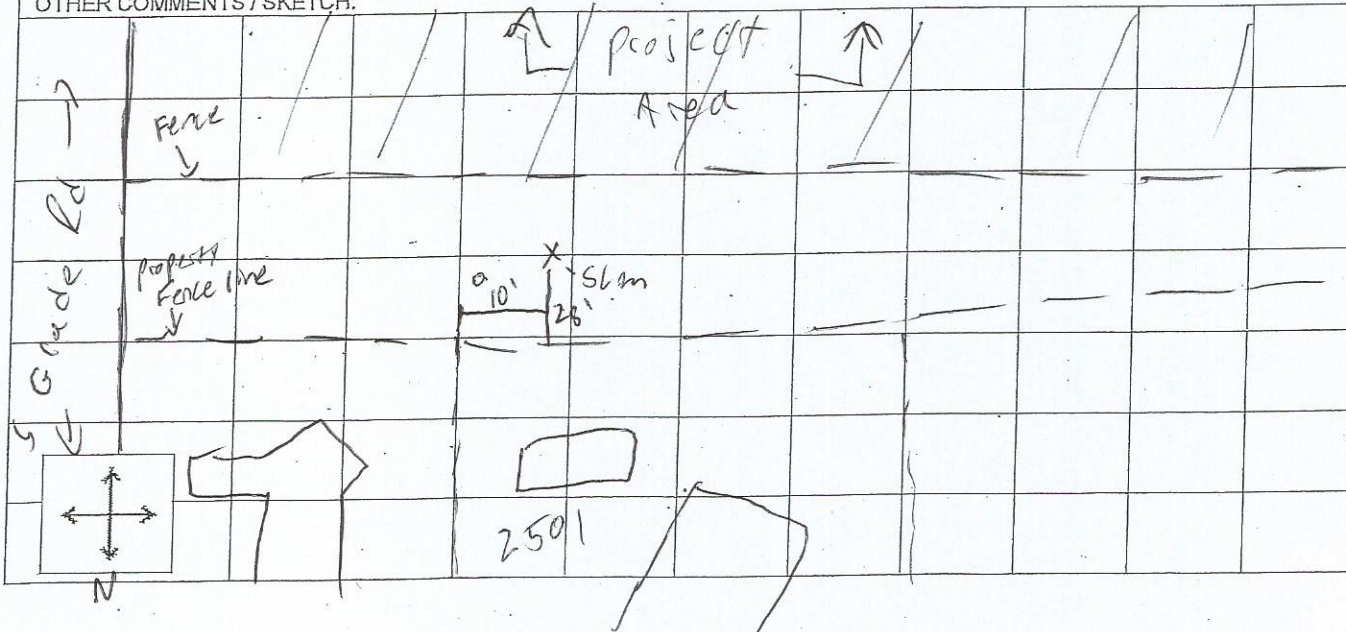
OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL / DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

DESCRIPTION / SKETCH:

TERRAIN: HARD SOFT MIXED FLAT OTHER:

PHOTOS:

OTHER COMMENTS / SKETCH:



FIELD NOISE MEASUREMENT DATA

PROJECT: Alpine Park PROJ. # 00098.20

SITE IDENTIFICATION: ST2 OBSERVER(S): JCR
 ADDRESS: 1725 2620 via viegas
 START DATE / TIME: 3/31/20 10:48 Am END DATE / TIME: 3/31/20 11:09 Am

METEOROLOGICAL CONDITIONS:

TEMP: 68 °F HUMIDITY: 52.0 %R.H. WIND: CALM LIGHT MODERATE VARIABLE
 WINDSPEED: 0-1 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
 SKY: SUNNY CLEAR OVCST PRILY CLOUDY FOG RAIN OTHER: _____

ACOUSTIC MEASUREMENTS:

INSTRUMENT: LD LXT TYPE: 12 SERIAL #: 4005
 CALIBRATOR: CAL 200 SERIAL #: 2916
 CALIBRATION CHECK, BEFORE: 114.0 AFTER: 113.96 WINDSCREEN X
 SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANS OTHER: _____

FILE / MEAS #	START TIME	END TIME	L _{eq}	max	1.67	8.33	25	50	90	99	min
<u>815</u>	<u>10:48 Am</u>	<u>11:08</u>	<u>51.2</u>	<u>68.5</u>	<u>61.8</u>	<u>54.6</u>	<u>50.3</u>	<u>45.3</u>	<u>37.7</u>	<u>35.3</u>	<u>33.1</u>

COMMENTS:

NOISE SOURCE INFO:

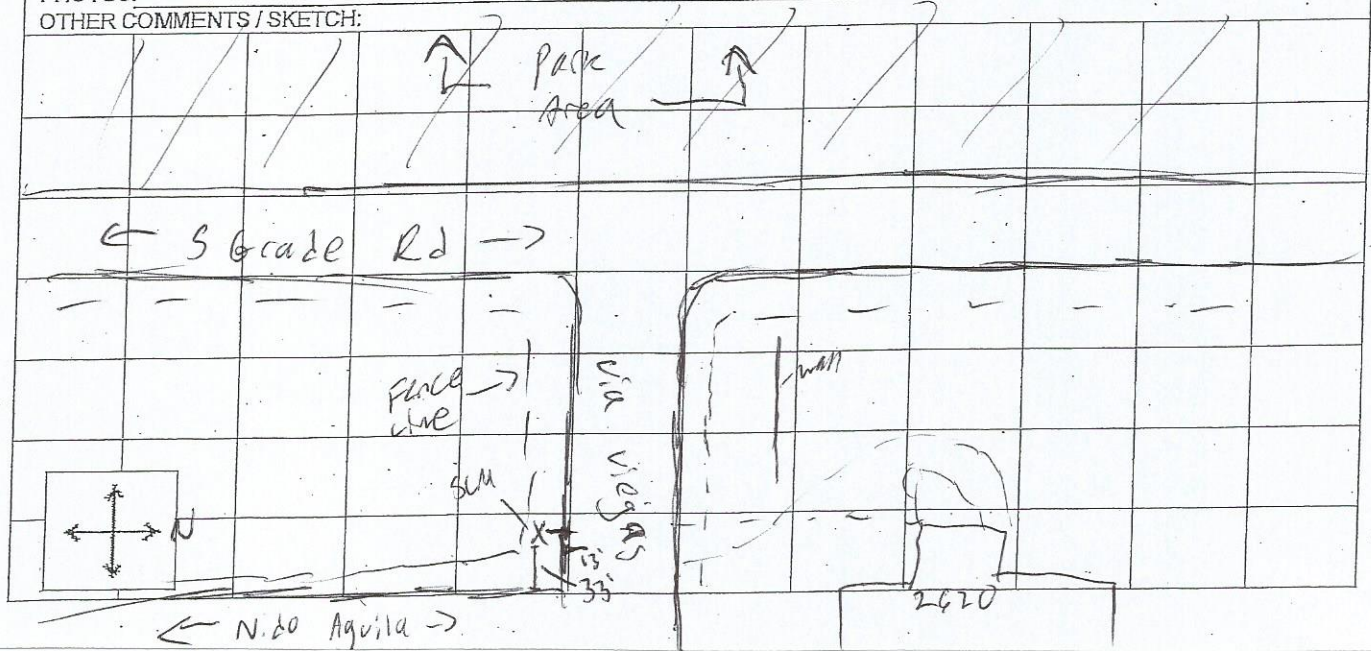
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER: _____
 ROADWAY TYPE: _____
 OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER: _____

DESCRIPTION / SKETCH:

TERRAIN: HARD SOFT MIXED FLAT OTHER: _____

PHOTOS: _____

OTHER COMMENTS / SKETCH:



FIELD NOISE MEASUREMENT DATA

PROJECT: Alpine Park

PROJ. # 000 98.28

SITE IDENTIFICATION: 5th

OBSERVER(S): JCR

ADDRESS: Park Area North of Grade Rd

START DATE / TIME: 3/31/20 11:48 am

END DATE / TIME: 3/31/20 12:08 pm

METEROLOGICAL CONDITIONS:

TEMP: 68 °F HUMIDITY: 49.0 %R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 0-1 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
SKY: SUNNY CLEAR OVCST PRTY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:

INSTRUMENT: LD LXT TYPE: ① 2 SERIAL #: 4605

CALIBRATOR: LAL 200

SERIAL #: 2916

CALIBRATION CHECK, BEFORE: 119.0 AFTER 113.93 WINDSCREEN X

SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

FILE / MEAS #	START TIME	END TIME	L _{eq}	max	1.67	8.33	25	L	50	90	99	min
1816	11:48	12:08	45.6	55.1	52.5	50.2	46.8	42.1	37.7	34.4	32.3	

COMMENTS:

NOISE SOURCE INFO:

PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:

ROADWAY TYPE:

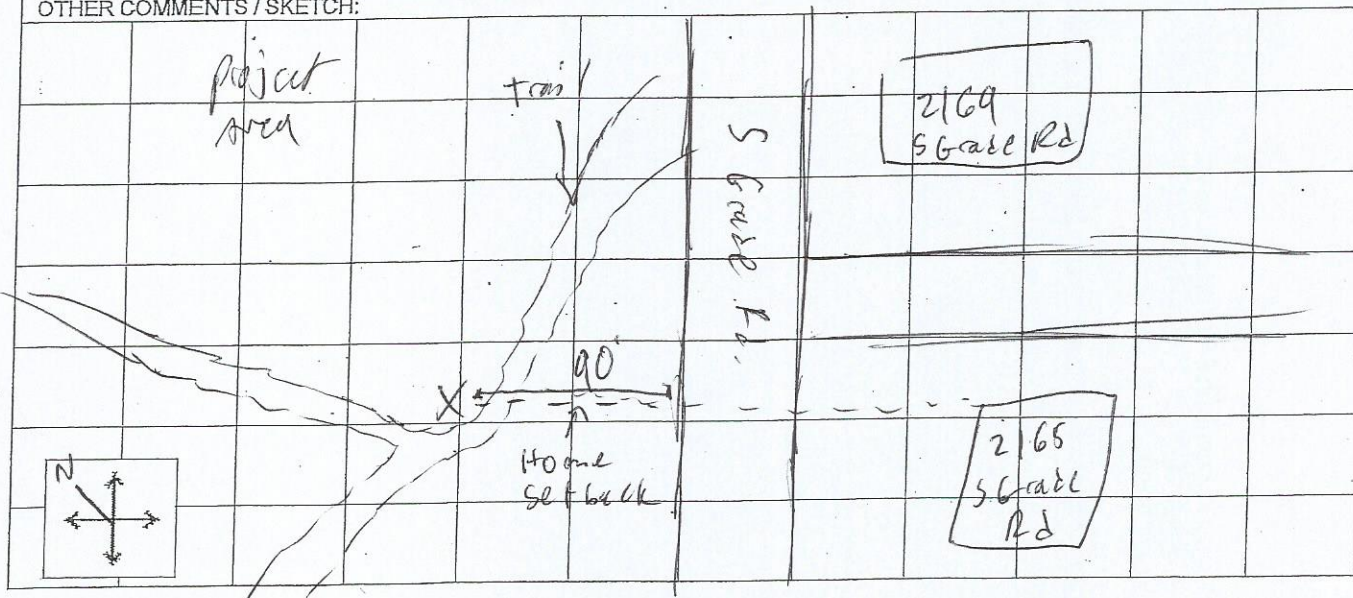
OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

DESCRIPTION / SKETCH:

TERRAIN: HARD SOFT MIXED FLAT OTHER:

PHOTOS:

OTHER COMMENTS / SKETCH:



FIELD NOISE MEASUREMENT DATA

PROJECT: Alpine Park

PROJ. # 00098.20

SITE IDENTIFICATION: LT1

OBSERVER(S): JCK

ADDRESS: Open park near Grand Rd & Calle de Compadres

START DATE / TIME: 3/27/20 - 11:05 AM

END DATE / TIME: 3/31/20 - 10:26 AM

METEOROLOGICAL CONDITIONS:

TEMP: _____ °F HUMIDITY: _____ %R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: _____ MPH DIR: N NE E SE S SW W NW STEADY GUSTY
SKY: SUNNY CLEAR OVCST PRTLY CLOUDY FOG RAIN OTHER: _____

ACOUSTIC MEASUREMENTS:

INSTRUMENT: Piccolo II-D TYPE: 1 ② SERIAL #: 2602
CALIBRATOR: CAL 200 SERIAL #: 2916
CALIBRATION CHECK, BEFORE: 94.0 AFTER 94.2 WINDSCREEN X
SETTINGS: A-WEIGHTED ② SLOW FAST FRONTAL RANDOM ② ANSI OTHER: _____

FILE / MEAS #	START TIME	END TIME	L _{eq}	max	1.67	8.33	25	50	90	99	min

COMMENTS: mounted @ 11:40, cleared @ 11:50 AM
pick up: 10:20 AM

NOISE SOURCE INFO:

PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER: _____

ROADWAY TYPE: _____

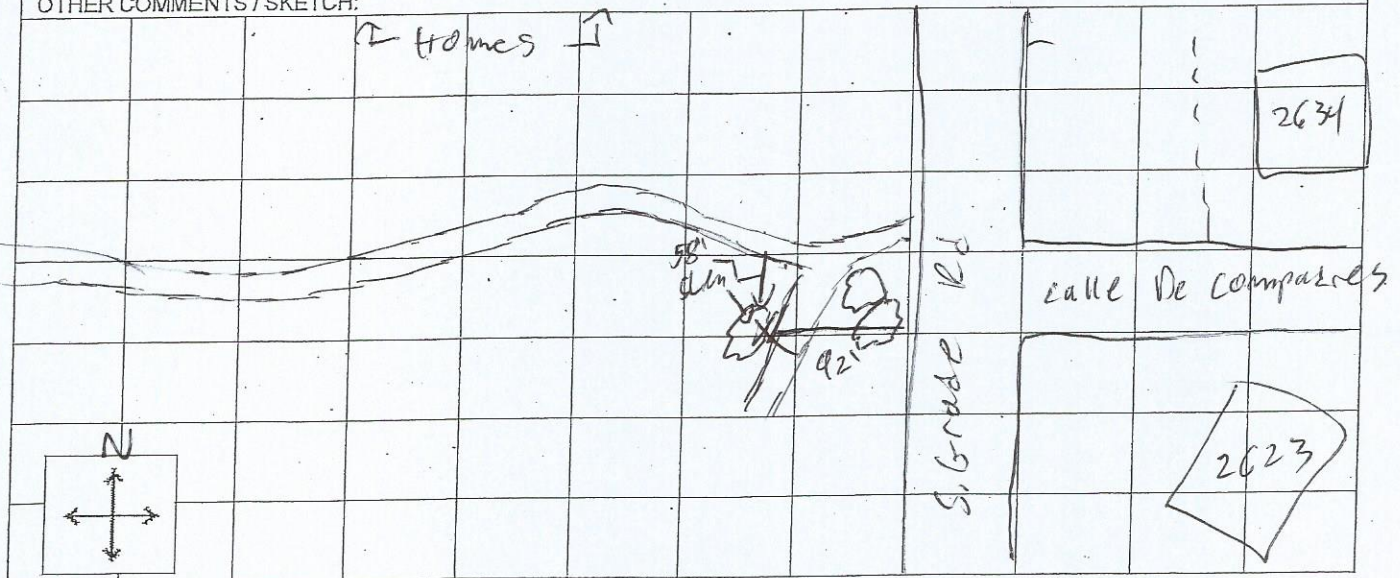
OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER: _____

DESCRIPTION / SKETCH:

TERRAIN: HARD ② MIXED FLAT OTHER: _____

PHOTOS: _____

OTHER COMMENTS / SKETCH: _____



FIELD NOISE MEASUREMENT DATA

PROJECT: Alpine park PROJ. # 00098-20

SITE IDENTIFICATION: LT2 OBSERVER(S): JCK
 ADDRESS: Near 2387 S Grase Rd
 START DATE / TIME: 3/27/20 11:07 AM END DATE / TIME: 3/31/20 11:28

METEROLOGICAL CONDITIONS:

TEMP: _____ °F HUMIDITY: _____ %R.H. WIND: CALM LIGHT MODERATE VARIABLE
 WINDSPEED: _____ MPH DIR: N NE E SE S SW W NW STEADY GUSTY
 SKY: SUNNY CLEAR OVCST PRTLY CLOUDY FOG RAIN OTHER: _____

ACOUSTIC MEASUREMENTS:

INSTRUMENT: Pico10 II-E TYPE: 1 (2) SERIAL #: 2502
 CALIBRATOR: CAL200 SERIAL #: 2916
 CALIBRATION CHECK, BEFORE: 99.0 AFTER: 94.2 WINDSCREEN X
 SETTINGS: A-WEIGHTED (S) SLOW (S) FAST FRONTAL (S) RANDOM (S) OTHER: _____

FILE / MEAS #	START TIME	END TIME	L _{eq}	max	1.67	8.33	25	L	50	90	99	min

COMMENTS: clears @ 1:30
pick up: 11:20 AM

NOISE SOURCE INFO:

PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER: _____

ROADWAY TYPE:

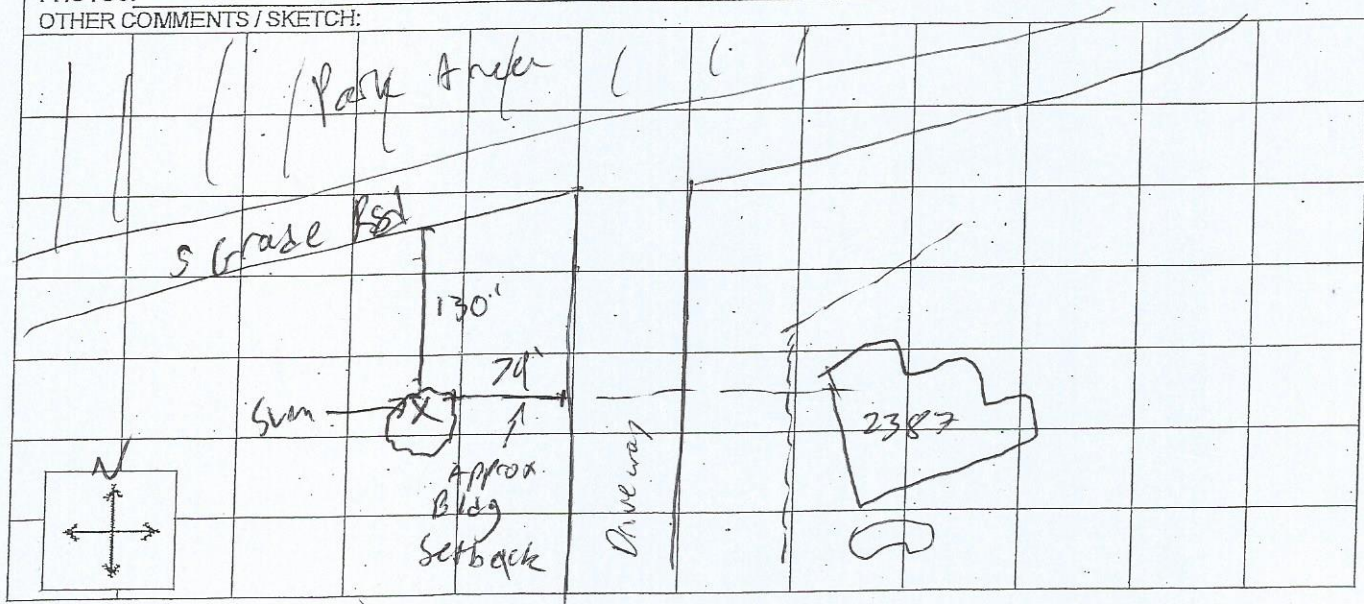
OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
 DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER: _____

DESCRIPTION / SKETCH:

TERRAIN: HARD (S) MIXED FLAT OTHER: _____

PHOTOS: _____

OTHER COMMENTS / SKETCH:



General

1st measurement - Reference measurement 131

11:49 AM start

- 10:00 AM session ended @ 11:45 AM, skate park was cleared for sanitation and 12 PM session

Skate park is empty

- Noise sources: Traffic on 241, music from skate park sound system, distant skate activity, near parking lot, Birds

SLM is positioned at the eastern end (least amount of traffic noise from lake forest and parking lot, various calls and ledges, skaters ride or go down across these features,

Start - 11:49 AM

Pre-cal 114.0

End - 12:00 PM

- Measured empty skate park as a reference

Leg	max	1.67	8.33	25	50	90	29 min	
57.0	65.5	61.5	59.5	57.9	56.4	53.5	51.2	49.3
File #	:	.131						

Measurement 2 - active park

Pre cal: 114.0

Notes:

12:00 pm session

SLM placed on eastern end

~ 15 active skaters in park

12:08 pm start ~ 4 active skaters at this end of the park

12:09: Skaters riding up Ramp and jumping over bench. Talking / shouting. Music / speech from speakers
Skater landing ~ 69-71 dBA

12:11: limited activity, skaters preparing for tricks

12:13: multiple skaters attempting the same trick.
riding up a ramp and jumping over a bench. Skater starts near the middle of the park, heads toward SLM, lands near sewer cap.

12:14: Group of skaters passed near SLM, outside of the park.

12:15 - Skaters attempt tricks on the flat surface part of the skate park

General note

Primary noise sources are skateboards landing or sliding across flat concrete, ledges or metal rails.

- music is present, some traffic noise and talking / shouting

weather data

68°F 49% humidity

Sunny, clear

3

wind: 3-4 mph SW

12:21 pm

10 active skaters at eastern end, near SLM
- skater is instructing younger skaters. having them
jump off a short ledge.

12:24

~ 6 skaters jumping and landing near SLM
~ 12-15 ft from SLM
- some talking and shouting
eq (10s) Range 65-72 dBA at skaters jumping off
ledge near SLM

12:28 ~ 14-20 total skaters in park.
~ 7 skaters active near SLM

12:30 less activity

~ 3 skaters attempting to jump and land off
ledge

12:32 - skaters pass near SLM, outside of
park.

12:33 - low activity at eastern end

~ 3 active skaters attempting various tricks
- music is constant, ~ 57-58 dBA
- traffic nearly inaudible

12:35

~ 5 skaters, similar activity

12:36 - roller skaters show up

~ 4 roller skaters, activity not very loud.

12:37. limited activity 1 skater near SLM

12:38pm measurement stopped

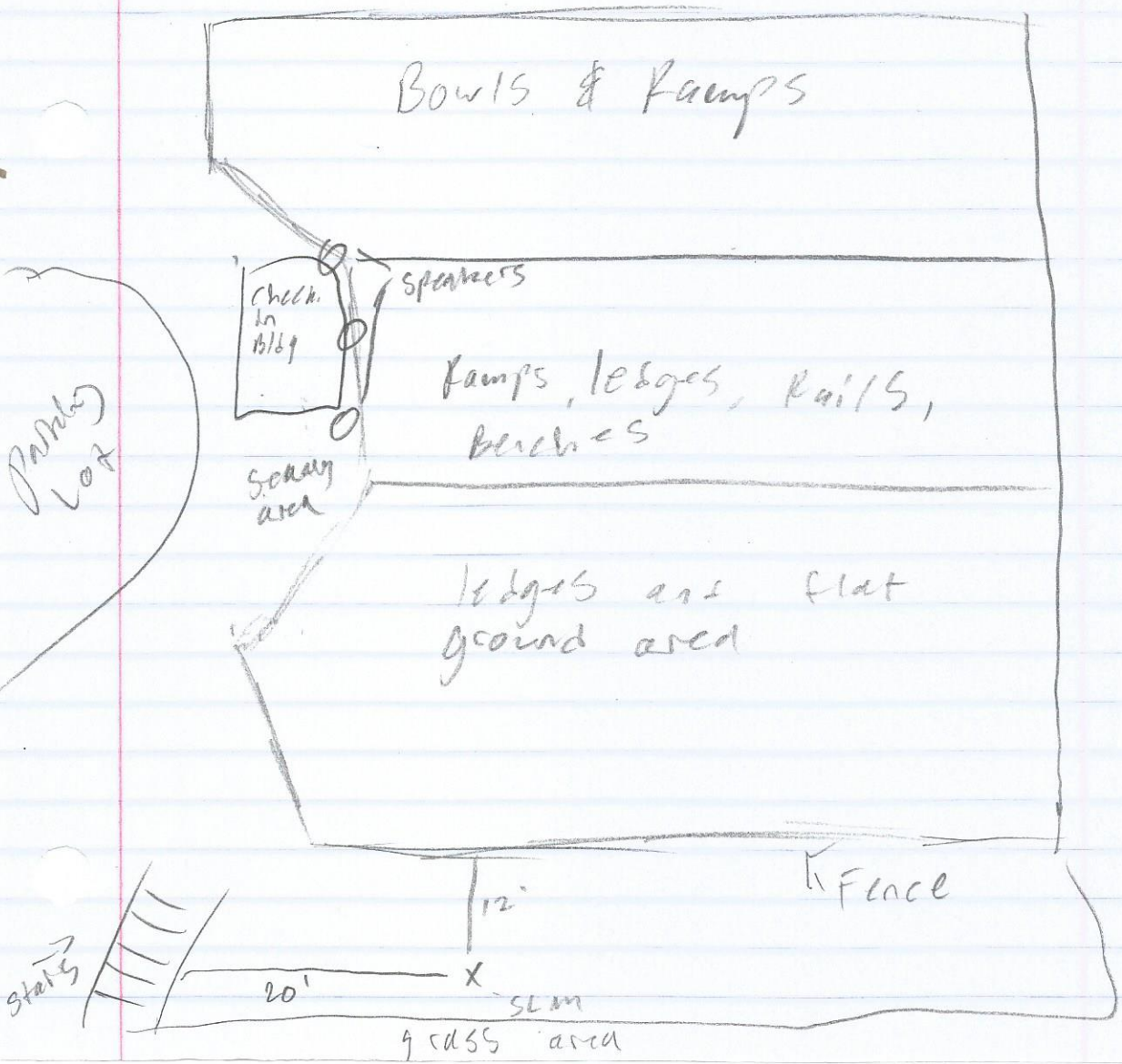
File #: .132

Leg: 66.5

Max: 85.0

min: 53.0

70°
120°



weather
65 °F
wind: 2-6 mph SSE
Ladera Ranch

63% hum.
Sunny, clear

5

Start 1:30 pm

pre-cal 114.0

- 1:30

- 3 scooters & 2 skate boarders
- scooters are very quiet, nearly inaudible
- skate boarders occasionally pass by skm

Noise sources include traffic noise (~53-56 dBA)

1:32 - 1 additional Skate boarder (3 total)

- skaters start skating from southern side into northern side, there are bowls

1:34

- active skateboarder skating in bowl for about 1 min
-

Notes

skaters drop into and out of bowls, creating wheel on concrete noise and noise from the board landing on pavement

1:36 - 1:37

Single skater riding inside bowl

1:38 pm limited to no activity, single skater to riding around the whole park

1:40 pm

1:41 - 2 active skaters in the bowl area

1:42 - more scooters showed up. 5 total.

1:43 - limited activity, talking and shouting from visitors.

1:44 - limited activity, 1 skateboarder left the park

1:46 activity is calm, mostly scooters near SLM

1:47 - 2 skateboarders active at southern end of park, further from SLM

1:47 to 1:52.

Skateboarders are active near southern end.

4 scooters active near SLM but activity is quiet. occasional scooter noise occurs when the body strikes the metal rail on the bowl

1:52 - 1:54

Motor bike active behind SLM

1:55 8 scooters active near SLM in Bowl area. Some scooter noise, mostly speech, traffic noise

1:56 - another skate bowler arrived 3 total
11 active visitors total.

1:57 - 1:58 - continued, spoke with park
visitor

End at 2:00 pm

File # .133.

Leg 37.1

max: 74.1

min: 44.2

2.11

8
2nd measurement - southern end
2:02pm start

- 2 active skateboarders riding around the
ramp/ledge/rail area.

Noise sources: skateboards impacting with the
ground, boards sliding on ground, ledges and
rails, boards landing on rails, skate activity
is the primary noise source.

2:06 1 active skateboarder, 3-4 scooters
riding around creating occasional noise.

2:07 - motor bike passed SLM.

2:09 - single skateboarder doing tricks near
south corner of skate park, occasional scooter
noise.

2:12 - motor bike passes by SLM

2:13 - 2 scooters exit park -
- 3 skateboarders enter park, passing
near SLM.

2:15 - 1 skater leaves and 1 arrives,
2 scooters leave

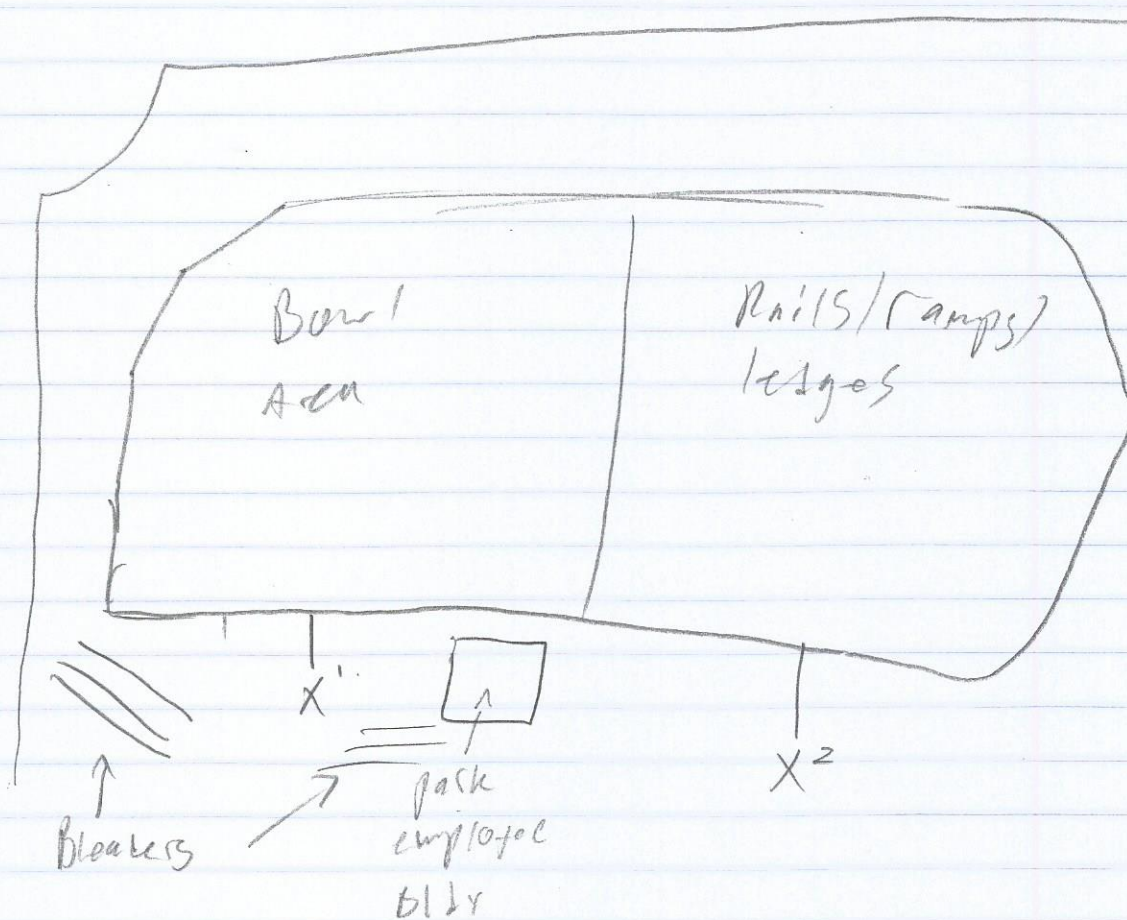
2:17 landscaping activity started near
SLM. Stopped measurement
File # 134.

Log 59.6

Curvy 75.1

Lnbr 45.3

Post Cal: 113.9



Noise Measurement Photographs



LT01 Looking North



LT01 Looking East



LT01 Looking South



LT01 Looking West

Noise Measurement Photographs



LT02 Looking North



LT02 Looking East



LT02 Looking South



LT02 Looking West

Noise Measurement Photographs



ST1 Looking North



ST01 Looking East



ST01 Looking South



ST01 Looking West

Noise Measurement Photographs



ST02 Looking North



ST02 Looking East



ST02 Looking South



ST02 Looking West

Noise Measurement Photographs



ST03 Looking Northeast



ST03 Looking Northwest



ST03 Looking Southeast



ST03 Looking Southwest

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/3/2021
Case Description: Grubbing

		---- Receptor #1 ----												
Description	Land Use	Baselines (dBA)												
		Daytime	Evening	Night										
North	Residential		1	1	1									
		Equipment												
Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated								
			Lmax	Lmax	Distance	Shielding								
			(dBA)	(dBA)	(feet)	(dBA)								
Dozer	No	40		81.7	310	0								
Dozer	No	40		81.7	310	0								
Dozer	No	40		81.7	310	0								
Excavator	No	40		80.7	310	0								
		Results												
		Calculated (dBA)	Noise Limits (dBA)								Noise Limit Exceedance (dBA)			
Equipment	*Lmax	Leq	Day	Evening		Night		Day	Evening		Night			
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq		
Dozer		65.8	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		65.8	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		65.8	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		64.9	60.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	65.8	67.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

----- Receptor #2 -----															
Description	Land Use	Baselines (dBA)													
		Daytime	Evening	Night											
East	Residential		1	1	1										
		Equipment													
Description	Impact Device	Usage(%)	Spec		Receptor Distance (feet)	Estimated Shielding (dBA)									
			Lmax (dBA)	Actual Lmax (dBA)											
Dozer	No		40		81.7	225	0								
Dozer	No		40		81.7	225	0								
Dozer	No		40		81.7	225	0								
Excavator	No		40		80.7	225	0								
		Results													
		Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
Equipment	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night		
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq			
Dozer		68.6	64.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer		68.6	64.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer		68.6	64.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator		67.6	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Total	68.6	70.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
*Calculated Lmax is the Loudest value.															

		---- Receptor #3 ----													
Description	Land Use	Baselines (dBA)													
		Daytime	Evening	Night											
South	Residential		1	1	1										
		Equipment													
Description		Impact	Device	Usage(%)	Spec	Actual	Receptor	Estimated							
					Lmax	Lmax	Distance	Shielding							
					(dBA)	(dBA)	(feet)	(dBA)							
Dozer		No		40		81.7	283	0							
Dozer		No		40		81.7	283	0							
Dozer		No		40		81.7	283	0							
Excavator		No		40		80.7	283	0							
		Results													
		Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
				Day		Evening		Night		Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer		66.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		66.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		66.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		65.7	61.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	66.6	68.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		*Calculated Lmax is the Loudest value.													

		---- Receptor #4 ----															
Description	Land Use	Baselines (dBA)															
		Daytime	Evening	Night													
50'	Residential		1	1	1												
		Equipment															
Description	Impact Device	Usage(%)	Spec		Receptor Distance (feet)	Actual		Estimated									
			Lmax	(dBA)		Lmax	(dBA)	Shielding	(dBA)								
Dozer	No		40			81.7		50	0								
Dozer	No		40			81.7		50	0								
Dozer	No		40			81.7		50	0								
Excavator	No		40			80.7		50	0								
		Results															
		Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)						
Equipment	*Lmax	Leq	Day		Leq	Evening		Lmax	Leq	Night	Lmax	Evening		Lmax	Leq		
			Lmax			Lmax	Leq					Lmax	Leq			Lmax	Leq
Dozer		81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Dozer		81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Dozer		81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Excavator		80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
	Total	81.7	83.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		*Calculated Lmax is the Loudest value.															

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/3/2021

Case Description Grading

		---- Receptor #1 ----				
		Baselines (dBA)				
Description	Land Use	Daytime	Evening	Night		
North	Residential	1	1	1		
		Equipment				
		Impact	Spec	Actual	Receptor	Estimated
		Device	Lmax	Lmax	Distance	Shielding
			(dBA)	(dBA)	(feet)	(dBA)
Dozer	No		40	81.7	310	0
Dozer	No		40	81.7	310	0
Dozer	No		40	81.7	310	0
Excavator	No		40	80.7	310	0
Roller	No		20	80	310	0
Front End Loader	No		40	79.1	310	0
Backhoe	No		40	77.6	310	0
Scraper	No		40	83.6	310	0

		Results																
		Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)							
				Day			Evening			Night			Day			Evening		
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer		65.8	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		65.8	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		65.8	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		64.9	60.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller		64.2	57.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader		63.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe		61.7	57.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper		67.7	63.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		67.7	70.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

		---- Receptor #2 ----		
Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
East	Residential	1	1	1

Description	Impact	Device	Usage(%)	Equipment		
				Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)
Dozer	No		40		81.7	225
Dozer	No		40		81.7	225
Dozer	No		40		81.7	225
Excavator	No		40		80.7	225
Roller	No		20		80	225
Front End Loader	No		40		79.1	225
Backhoe	No		40		77.6	225
Scraper	No		40		83.6	225

Equipment	Results													
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)				
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Dozer	68.6	64.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	68.6	64.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	68.6	64.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	67.6	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	66.9	59.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	66	62.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	64.5	60.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	70.5	66.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	70.5	72.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

		---- Receptor #3 ----		
Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
South	Residential	1	1	1

Description	Impact	Device	Usage(%)	Equipment		
				Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)
Dozer	No		40		81.7	283
Dozer	No		40		81.7	283
Dozer	No		40		81.7	283
Excavator	No		40		80.7	283
Roller	No		20		80	283
Front End Loader	No		40		79.1	283
Backhoe	No		40		77.6	283
Scraper	No		40		83.6	283

Equipment	Calculated (dBA)		Results								Noise Limit Exceedance (dBA)					
					Noise Limits (dBA)											
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq		
Dozer	66.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Dozer	66.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Dozer	66.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Excavator	65.7	61.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Roller	64.9	58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Front End Loader	64.1	60.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Backhoe	62.5	58.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Scraper	68.5	64.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Total	68.5	70.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

*Calculated Lmax is the Loudest value.

Description	Land Use	Baselines (dBA)			---- Receptor #4 ----	
		Daytime	Evening	Night		
		1	1	1		

Description	Impact	Device	Usage(%)	Equipment		
				Spec Lmax	Actual Lmax	Receptor Distance
				(dBA)	(dBA)	(feet)
Dozer	No		40		81.7	50
Dozer	No		40		81.7	50
Dozer	No		40		81.7	50
Excavator	No		40		80.7	50
Roller	No		20		80	50
Front End Loader	No		40		79.1	50
Backhoe	No		40		77.6	50
Scraper	No		40		83.6	50

Equipment	Calculated (dBA)		Results						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	80	73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	83.6	79.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	83.6	85.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/3/2021

Case Description: Drainage

		---- Receptor #1 ----		
Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
North	Residential	1	1	1

		Equipment				
Description	Device	Impact Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Dozer	No	40		81.7	310	0
Dozer	No	40		81.7	310	0
Dozer	No	40		81.7	310	0
Compressor (air)	No	40	80		310	0
Backhoe	No	40		77.6	310	0

		Results													
		Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
Equipment				Day		Evening		Night		Day		Evening		Night	
		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer		65.8	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		65.8	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		65.8	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)		64.2	60.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe		61.7	57.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		65.8	67.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

		---- Receptor #2 ----													
Description	Land Use	Baselines (dBA)													
		Daytime	Evening	Night											
East	Residential	1	1	1											
		Equipment													
		Impact		Spec	Actual	Receptor	Estimated								
		Device	Usage(%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)								
Dozer		No	40		81.7	225	0								
Dozer		No	40		81.7	225	0								
Dozer		No	40		81.7	225	0								
Compressor (air)		No	40	80		225	0								
Backhoe		No	40		77.6	225	0								
		Results													
		Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)						
				Day		Evening		Night		Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer		68.6	64.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		68.6	64.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		68.6	64.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)		66.9	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe		64.5	60.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	68.6	70.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		*Calculated Lmax is the Loudest value.													

		---- Receptor #3 ----													
Description	Land Use	Baselines (dBA)													
		Daytime	Evening	Night											
South	Residential	1	1	1											
		Equipment													
		Impact		Spec	Actual	Receptor	Estimated								
		Device	Usage(%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)								
Dozer		No	40		81.7	283	0								
Dozer		No	40		81.7	283	0								
Dozer		No	40		81.7	283	0								
Compressor (air)		No	40	80		283	0								
Backhoe		No	40		77.6	283	0								
		Results													
		Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)						
				Day		Evening		Night		Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer		66.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		66.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		66.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)		64.9	61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe		62.5	58.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	66.6	68.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		*Calculated Lmax is the Loudest value.													

*Calculated Lmax is the Loudest value.

		---- Receptor #4 ----													
Description	Land Use	Baselines (dBA)													
		Daytime	Evening	Night											
50'	Residential	1	1	1											
		Equipment													
		Impact		Spec	Actual	Receptor	Estimated								
		Device	Usage(%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)								
Dozer		No	40		81.7	50	0								
Dozer		No	40		81.7	50	0								
Dozer		No	40		81.7	50	0								
Compressor (air)		No	40	80		50	0								
Backhoe		No	40		77.6	50	0								
		Results													
		Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)						
				Day		Evening		Night		Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer		81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)		80	76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe		77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	81.7	83.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		*Calculated Lmax is the Loudest value.													

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/3/2021

Case Description: Construction

---- Receptor #1 ----				
Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
North	Residential	1	1	1

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	310	0
Dozer	No	40		81.7	310	0
Crane	No	16		80.6	310	0
Compressor (air)	No	40	80		310	0
Generator	No	50		80.6	310	0
Front End Loader	No	40		79.1	310	0
Front End Loader	No	40		79.1	310	0
Front End Loader	No	40		79.1	310	0

Equipment	Results								Noise Limit Exceedance (dBA)					
	Calculated (dBA)		Noise Limits (dBA)						Day		Evening		Night	
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	65.8	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	65.8	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	64.7	56.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	64.2	60.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	64.8	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	63.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	63.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	63.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	65.8	69.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Baselines (dBA)		
Daytime	Evening	Night
1	1	1

Description	Impact Device	Usage(%)	Equipment			
			Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Dozer	No	40		81.7	225	0
Dozer	No	40		81.7	225	0
Crane	No	16		80.6	225	0
Compressor (air)	No	40	80		225	0
Generator	No	50		80.6	225	0
Front End Loader	No	40		79.1	225	0
Front End Loader	No	40		79.1	225	0
Front End Loader	No	40		79.1	225	0

Results

[illegible]

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA)			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121
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Results

[illegible]

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA)			Receptor Distance (feet)	Estimated Shielding (dBA)	
		Daytime	Evening	Night			
50'	Residential	1	1	1			
Description	Impact Device	Usage(%)	Equipment			Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)			
Dozer	No	40		81.7	50	0	
Dozer	No	40		81.7	50	0	
Crane	No	16		80.6	50	0	
Compressor (air)	No	40	80		50	0	
Generator	No	50		80.6	50	0	
Front End Loader	No	40		79.1	50	0	
Front End Loader	No	40		79.1	50	0	
Front End Loader	No	40		79.1	50	0	

Results

[illegible]

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/3/2021

Case Description: Trenching

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
North	Residential	1	1	1

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	50	0
Front End Loader	No	40		79.1	50	0

Results

Equipment	Calculated (dBA)	Noise Limits (dBA)								Noise Limit Exceedance (dBA)					
		Day		Evening		Night		Day		Evening		Night			
		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator		80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader		79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		80.7	79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
East	Residential	1	1	1

Description	Impact Device	Usage(%)	Equipment			
			Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Excavator	No	40		80.7	50	0
Front End Loader	No	40		79.1	50	0

		Results														
		Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
				Day	Evening			Night				Day	Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Excavator		80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Front End Loader		79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Total	80.7	79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		*Calculated Lmax is the Loudest value.														

---- Receptor #3 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
South	Residential	1	1	1

Description	Impact Device	Usage(%)	Equipment			
			Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Excavator	No	40		80.7	50	0
Front End Loader	No	40		79.1	50	0

		Results														
		Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
				Day	Evening			Night				Day	Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Excavator		80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Front End Loader		79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Total	80.7	79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		*Calculated Lmax is the Loudest value.														

---- Receptor #4 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
50'	Residential	1	1	1

Description	Impact Device	Usage(%)	Equipment			
			Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Excavator	No	40		80.7	50	0
Front End Loader	No	40		79.1	50	0

		Results														
		Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
				Day	Evening			Night				Day	Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Excavator		80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Front End Loader		79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Total	80.7	79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		*Calculated Lmax is the Loudest value.														

Alpine Park Project Construction Assumptions

Phase	Equipment	CalEEMod Equivalent	Quantity	Start Date	End Date	# of Workdays	Personnel Ave Daily	Worker Trips per day (In/Out)	Total Haul Trucks	Total Haul Truck Trips (In/Out)	Haul Truck Trips per day (In/Out)
Grubbing/Land Clearing	Crawler Tractors	Crawler Tractors	3	10/1/2022	10/15/2022	10	8	16			
Grubbing/Land Clearing	Excavators	Excavators	1	10/1/2022	10/15/2022	10					
Grading/Excavation	Crawler Tractors	Crawler Tractors	3	10/1/2022	5/31/2023	173	18	36	518	1,036	6
Grading/Excavation	Excavators	Excavators	1	10/1/2022	5/31/2023	173					
Grading/Excavation	Rollers	Rollers	1	10/1/2022	5/31/2023	173					
Grading/Excavation	Rubber Tired Loaders	Rubber Tired Loaders	1	10/1/2022	5/31/2023	173					
Grading/Excavation	Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	1	10/1/2022	5/31/2023	173					
Grading/Excavation	Wheel Tractor Scraper	Scrapers	2	10/1/2022	5/31/2023	173					
Drainage/Utilities/Subgrade	Air Compressors	Air Compressors	1	5/1/2023	8/31/2023	89	12	24			
Drainage/Utilities/Subgrade	Generator Sets	Generator Sets	1	5/1/2023	8/31/2023	89					
Drainage/Utilities/Subgrade	Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	4	5/1/2023	8/31/2023	89					
Sewer Line Installation	Excavators	Excavators	1	10/1/2022	6/1/2023	174	6	12			
Sewer Line Installation	Rollers	Rollers	1	10/1/2022	6/1/2023	174					
Sewer Line Installation	Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	1	10/1/2022	6/1/2023	174					
Construction	Air Compressors	Air Compressors	1	6/1/2023	1/31/2024	175	16	32	328	656	4
Construction	Cranes	Cranes	1	6/1/2023	1/31/2024	175					
Construction	Forklifts	Forklifts	3	6/1/2023	1/31/2024	175					
Construction	Generator Sets	Generator Sets	1	6/1/2023	1/31/2024	175					
Construction	Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	2	6/1/2023	1/31/2024	175					
Paving	Pavers	Pavers	1	11/30/2023	1/31/2024	45	6	12			
Paving	Paving Equipment	Paving Equipment	1	11/30/2023	1/31/2024	45					
Paving	Rollers	Rollers	1	11/30/2023	1/31/2024	45					
Architectural Coating	Air Compressors	Air Compressors	1	12/14/2023	1/31/2024	35	2	4			

This spreadsheet calculates traffic noise levels based on TNM Version 2.5 Lookup Tables.

**** Type in yellow cells only.**

<u>Traffic Data:</u>	<u>Units:</u>	Calculate
Enter ADT Traffic	Metric	
Enter Loudest-hour Traffic	English	



Link	Roadway	Segment Location	Hard or Soft Ground (H or S)	BARRIER		
				Present 1=yes	Height min. 7 ft. max. 32 ft.	Distance 35 ft. or 100 ft.
1	Existing south Grade Rd	west of Via Viejas	S			
2	Existing south Grade Rd	east of Via Viejas	S			
3	Existing+project south Grade Rd	west of Via Viejas	S			
4	Existing+project south Grade Rd	east of Via Viejas	S			
5	near-term south Grade Rd	west of Via Viejas	S			
6	near-term south Grade Rd	east of Via Viejas	S			
7	near-term+project south Grade Rd	west of Via Viejas	S			
8	near-term+project south Grade Rd	east of Via Viejas	S			
9						
10						
11						
12						

Total Daily Traffic Volumes (ADT)	Traffic Mix		Vehicle Speed
	Number #	Description	mph max. 80
4,042	4	Generic - Local (From Local/Lodi)	40
3,097	4	Generic - Local (From Local/Lodi)	40
4,282	4	Generic - Local (From Local/Lodi)	40
3,337	4	Generic - Local (From Local/Lodi)	40
4,130	4	Generic - Local (From Local/Lodi)	40
3,185	4	Generic - Local (From Local/Lodi)	40
4,370	4	Generic - Local (From Local/Lodi)	40
3,425	4	Generic - Local (From Local/Lodi)	40

Sound Levels at Receiver Locations			
Distance feet, min. 33 max. 1000	dB Ldn	dB CNEL	dBA Leq1h (loudest hour)
50	60.8	61.2	59.1
50	59.7	60.1	58.0
50	61.1	61.5	59.4
50	60.0	60.4	58.3
50	60.9	61.3	59.2
50	59.8	60.2	58.1
50	61.1	61.6	59.5
50	60.1	60.5	58.4