Appendix G
Noise Data

FIELD NOISE MEASUREMENT DATA

PROJECT: Alpine Park PROJ. # 000 98.20

SITE IDENTIFICATION: ST 1 OBSERVER(S): JCR

ADDRESS: Near 2501 Engelmann Oak Ln

START DATE / TIME: 3/31/20 - 9:45 AM END DATE / TIME: 3/31/20 - 10:05 AM

METEROLOGICAL CONDITIONS:

TEMP: 62 °F HUMIDITY: 70.0 %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 (OVRCST) PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:

INSTRUMENT: LD LXT TYPE: (G) 2 SERIAL #: 4005

CALIBRATOR: CAL 200 SERIAL #: 2916

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	L 25	50	90	99	min
.814	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

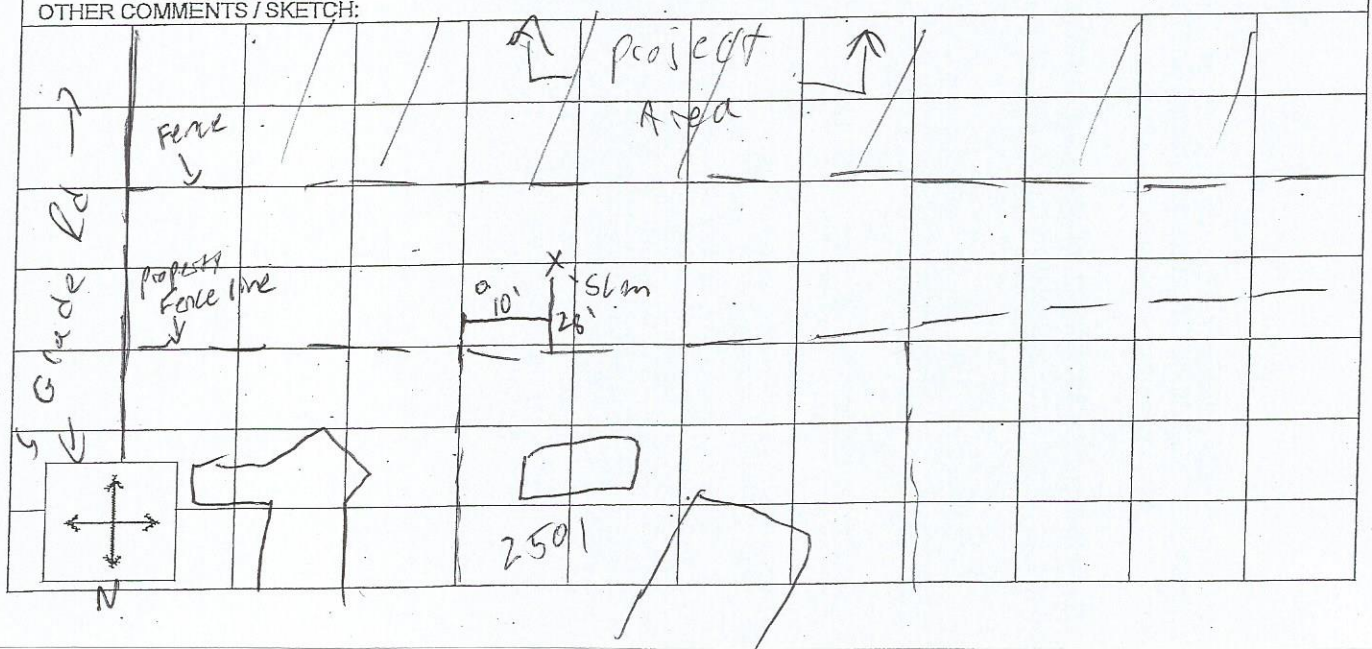
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. (LANDSCAPING ACTIVITIES) / OTHER:

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: near 2620 via Viejas

START DATE / TIME: 3/31/20 10:48 Am END DATE / TIME: 3/31/20 11:08 Am

METEROLOGICAL 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 (OVRCST) PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:

INSTRUMENT: LD LXT TYPE: (1) 2 SERIAL #: 4005

CALIBRATOR: CAL 200 SERIAL #: 2916

CALIBRATION CHECK, BEFORE: 114.0 AFTER 113.96 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
							L				
815	10:48 Am	11:08	51.2	68.5	61.8	54.6	50.3	45.3	37.7	35.3	33.1

COMMENTS:

NOISE SOURCE INFO:

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL (AMBIENT) OTHER:

ROADWAY TYPE:

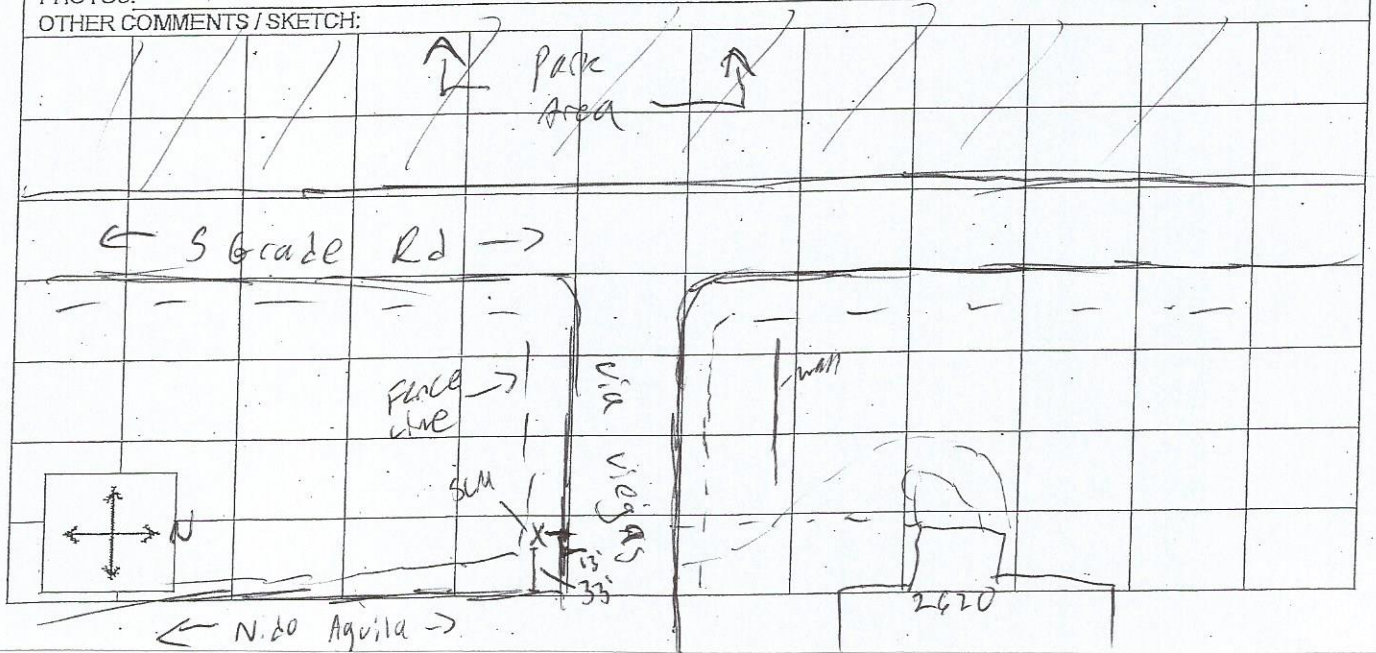
OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / (BIRDS) / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

DESCRIPTION / SKETCH:

TERRAIN: (HARD) SOFT MIXED FLAT OTHER:

PHOTOS:

OTHER COMMENTS / SKETCH:



FIELD NOISE MEASUREMENT DATA

PROJECT: Alpine Park PROJ. # 000 98.20

SITE IDENTIFICATION: ST3 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 OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:

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

CALIBRATOR: CAL 200 SERIAL #: 2916

CALIBRATION CHECK, BEFORE: 114.0 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	L 25	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:

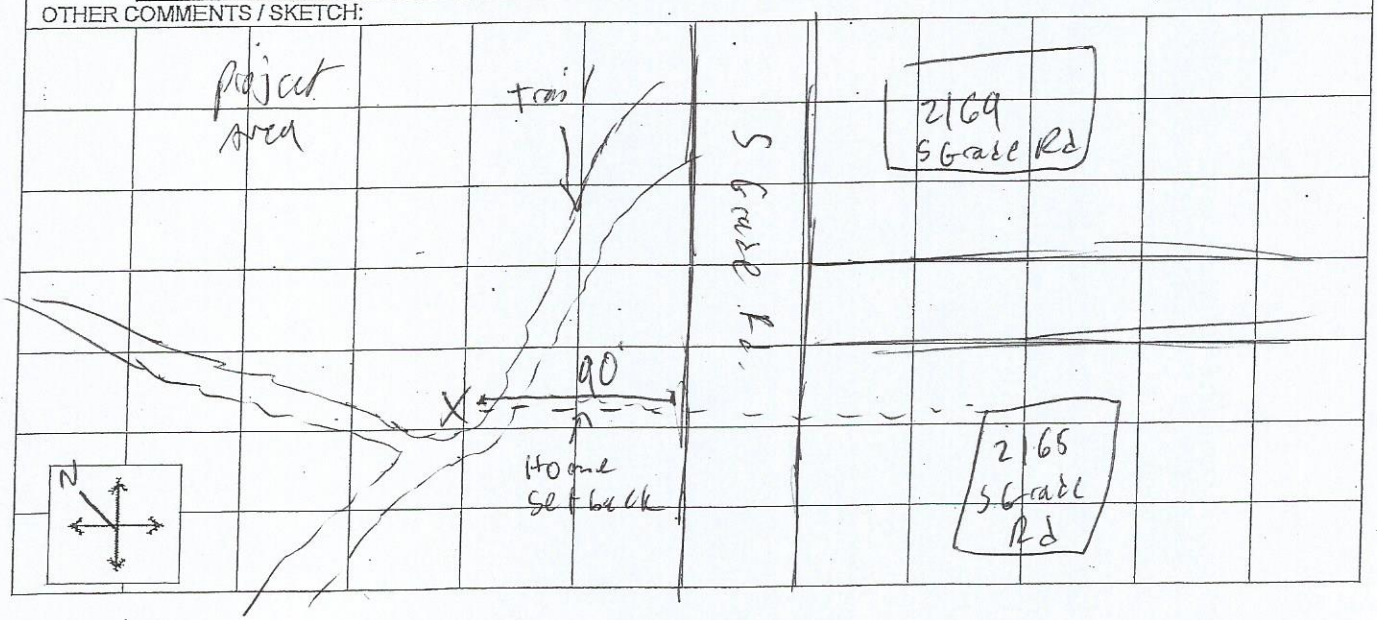
OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

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: Ofer park near Grass Rd & Calle de compadres

START DATE / TIME: 3/27/20 - 11:05 AM END DATE / TIME: 3/31/20 · 10:20 Am

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 OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:

INSTRUMENT: ~~Piccolo~~ 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~~ ~~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

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: ____

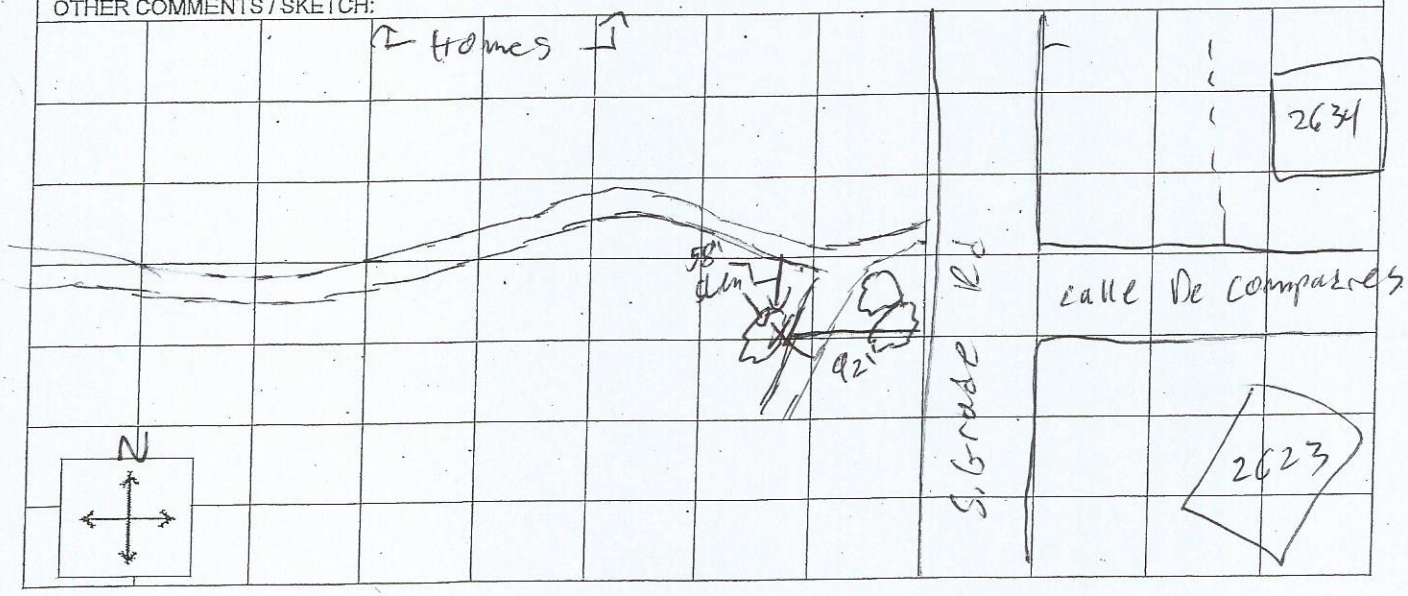
OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

DESCRIPTION / SKETCH:

TERRAIN: HARD ~~SOFT~~ 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 Grade 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 OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:

INSTRUMENT: Piccolo II - E TYPE: 1 (2) SERIAL #: 2502

CALIBRATOR: CAL200 SERIAL #: 2916

CALIBRATION CHECK, BEFORE: 94.0 AFTER 94.2 WINDSCREEN X

SETTINGS: A-WEIGHTED (SLOW) FAST FRONTAL RANDOM (ANSI) OTHER: ____

FILE / MEAS #	START TIME	END TIME	L_{eq}	max	1.67	8.33	L_{25}	L_{50}	L_{90}	L_{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: ____

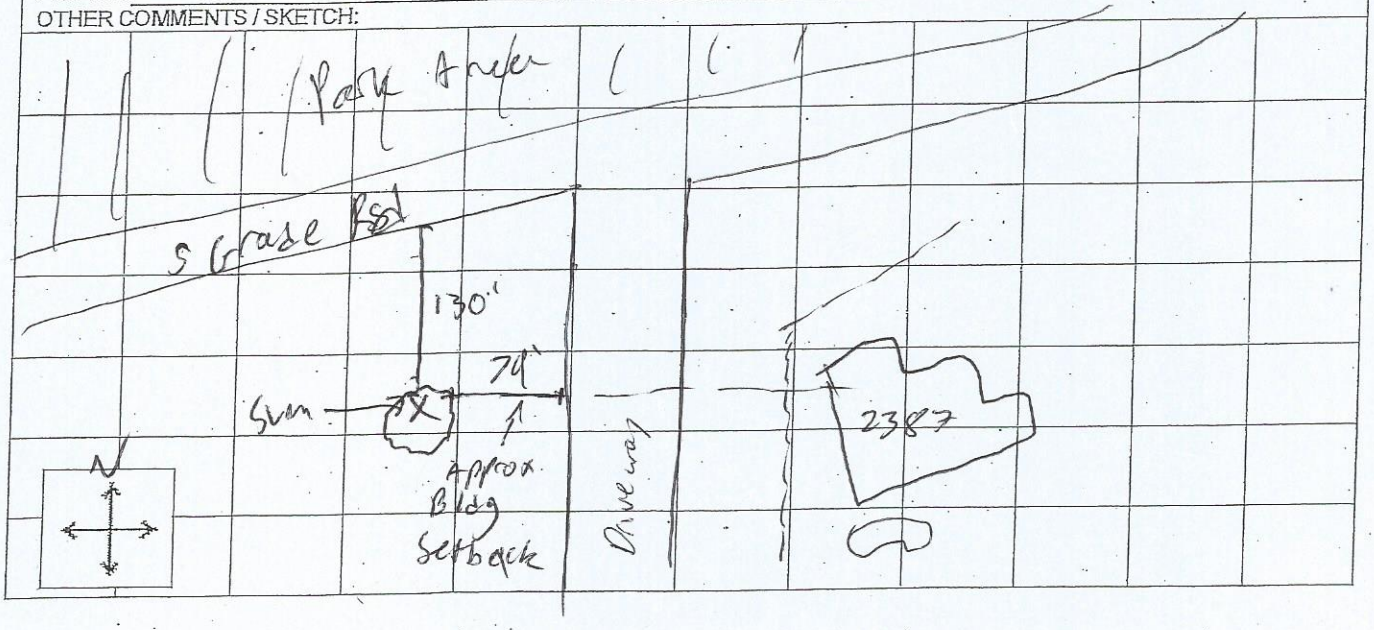
OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

DESCRIPTION / SKETCH:

TERRAIN: HARD (SOFT) 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 12pm 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 rails and ledges, skaters ride or grind across these features)

Start - 11:49 Am Pre-cal 114.0

End - 12:00 pm

- Measured empty skate park as a reference

Leq	Max	1.67	8.33	25	50	90	99 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 grease 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

wind: 3-4 mph SSW

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
t_{eq}(10s) Range 65-72 dBA at skaters jumping off ledge near SLM

12:28 ~ 19-20 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.

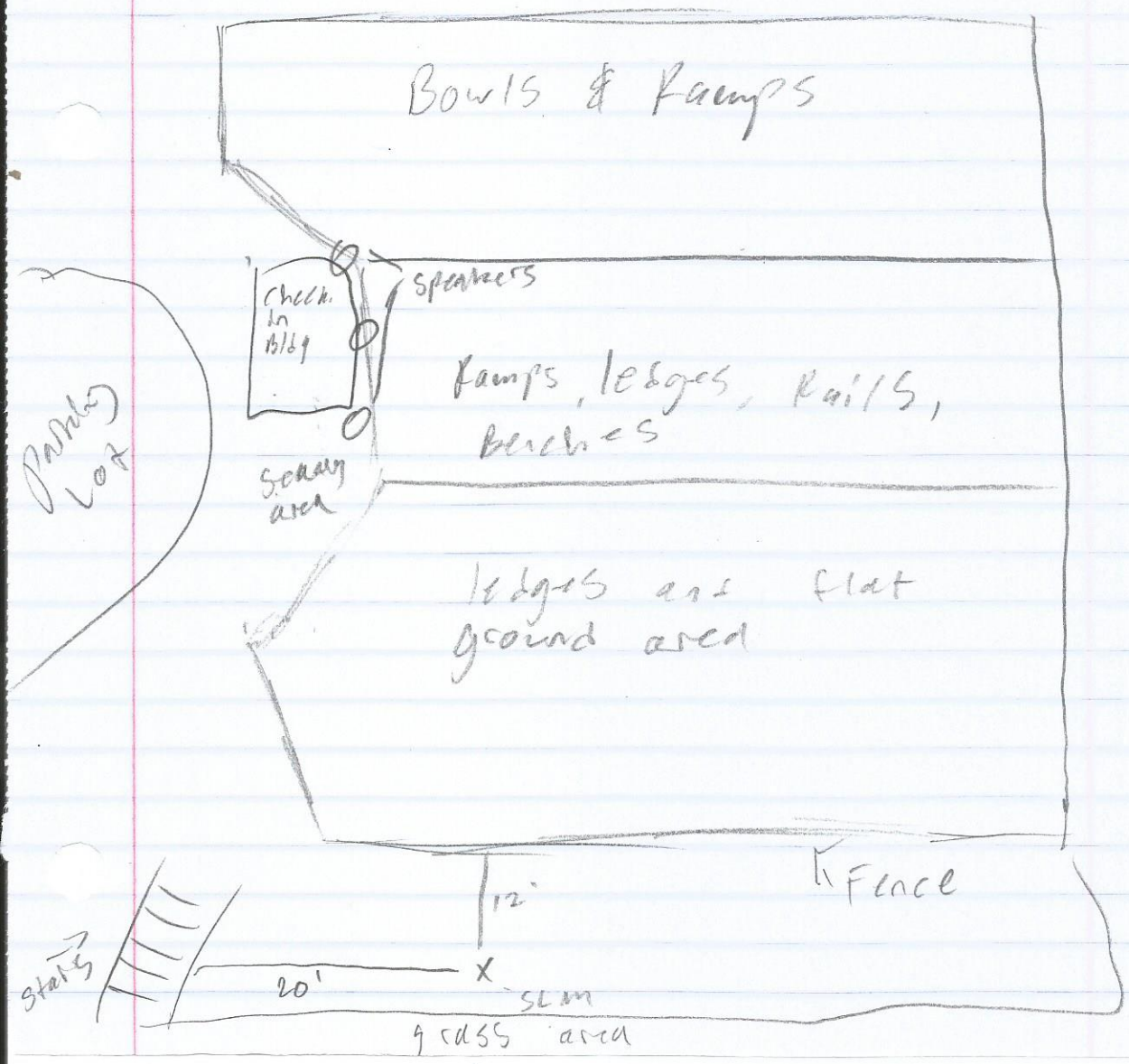
12:37 - limited activity 1 skater near SLM

12:38pm measurement stopped

File #: .132

Leq: 66.5
Max: 85.0
min: 53.0

70'
12'



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
- skateboarders occasionally pass by slow

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, where 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

1:39 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 skateboarder arrived 3 total
11 active visitors total.

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

End at 2:00 pm
File# .133.
Leq 37.1
max: 54.1
min: 44.2

111

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 minimal noise.

2:07 - motor bike passed SLM.

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

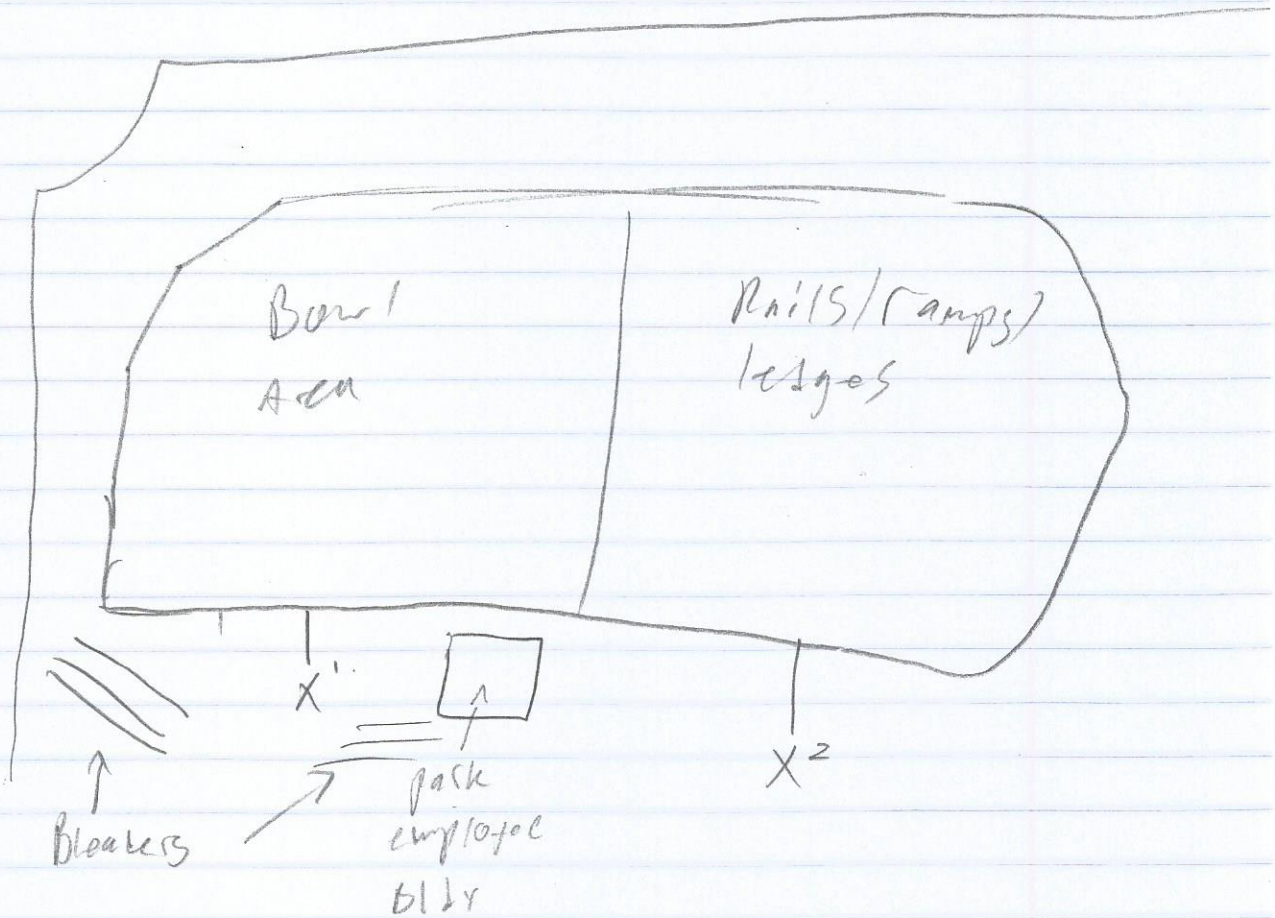
2:12 - motor bike passes by SLM

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
Leq 59.6
Lmax 75.1
Lmin 46.3

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 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
Dozer	No	40		81.7	310	0
Excavator	No	40		80.7	310	0

Results

Equipment	Calculated (dBA) *Lmax	Calculated (dBA) Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night 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
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
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	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)	Estimated Shielding (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)					
				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
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
	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	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

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

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(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 ----

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

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(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)					
				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
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 ----

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
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) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	*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
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
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
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
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
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
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

*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)	Estimated Shielding (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
Roller	No	20		80	225	0
Front End Loader	No	40		79.1	225	0
Backhoe	No	40		77.6	225	0
Scraper	No	40		83.6	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
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 ----

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

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(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
Roller	No	20		80	283	0
Front End Loader	No	40		79.1	283	0
Backhoe	No	40		77.6	283	0
Scraper	No	40		83.6	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
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.

---- Receptor #4 ----

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

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(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
Roller	No	20		80	50	0
Front End Loader	No	40		79.1	50	0
Backhoe	No	40		77.6	50	0
Scraper	No	40		83.6	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
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

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
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)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*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 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
East	Residential	1	1	1

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated 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 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
South	Residential	1	1	1

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated 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.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
50'	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	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) Day		Evening		Night		Noise Limit Exceedance (dBA) 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.

Roadway Construction Noise Model (RCNM),Version 1.1

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

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

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(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

			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		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 ----

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

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated 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

	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
Crane	67.5	59.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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
Generator	67.6	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
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
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
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
Total	68.6	72.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

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

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Dozer	No	40		81.7	283	0
Dozer	No	40		81.7	283	0
Crane	No	16		80.6	283	0
Compressor (air)	No	40	80		283	0
Generator	No	50		80.6	283	0
Front End Loader	No	40		79.1	283	0
Front End Loader	No	40		79.1	283	0
Front End Loader	No	40		79.1	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	
Crane		65.5	57.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
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	
Generator		65.6	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	
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	
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	
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	
	Total	66.6	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	

*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 Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (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

Equipment	Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night 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
Crane	80.6	72.6	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)	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
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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
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
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	81.7	85.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

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

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

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(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 #2 ----

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

Equipment

Description	Impact Device	Usage(%)	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

	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

Equipment

Description	Impact Device	Usage(%)	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

	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

Equipment

Description	Impact Device	Usage(%)	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

		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.**

Traffic Data:

- ☐ Enter ADT Traffic
- ☐ Enter Loudest-hour Traffic

Units:

- ☐ Metric
- ☐ English

Calculate

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Link	Roadway	Segment Location	Hard or Soft Ground (H or S)	BARRIER			Total Daily Traffic Volumes **(ADT)**	Traffic Mix		Vehicle Speed	Sound Levels at Receiver Locations			
				Present 1=yes	Height min. 7 ft. max. 32 ft.	Distance 35 ft. or 100 ft.		Number #	Description	mph max. 80	Distance feet, min. 33 max. 1000	dB Ldn	dB CNEL	dBA Leq1h (loudest hour)
1	Existing south Grade Rd	west of Via Viejas	S				4,042	4	Generic - Local (From Local/Lodi)	40	50	60.8	61.2	59.1
2	Existing south Grade Rd	east of Via Viejas	S				3,097	4	Generic - Local (From Local/Lodi)	40	50	59.7	60.1	58.0
3	Existing+project south Grade Rd	west of Via Viejas	S				4,282	4	Generic - Local (From Local/Lodi)	40	50	61.1	61.5	59.4
4	Existing+project south Grade Rd	east of Via Viejas	S				3,337	4	Generic - Local (From Local/Lodi)	40	50	60.0	60.4	58.3
5	near-term south Grade Rd	west of Via Viejas	S				4,130	4	Generic - Local (From Local/Lodi)	40	50	60.9	61.3	59.2
6	near-term south Grade Rd	east of Via Viejas	S				3,185	4	Generic - Local (From Local/Lodi)	40	50	59.8	60.2	58.1
7	near-term+project south Grade Rd	west of Via Viejas	S				4,370	4	Generic - Local (From Local/Lodi)	40	50	61.1	61.6	59.5
8	near-term+project south Grade Rd	east of Via Viejas	S				3,425	4	Generic - Local (From Local/Lodi)	40	50	60.1	60.5	58.4
9														
10														
11														
12														