

**APPENDIX C- Noise Analysis
for the INITIAL STUDY with PROPOSED MITIGATED NEGATIVE DECLARATION
1675 MONTEREY ROAD, SAN JOSE, CALIFORNIA**

CP21-018

November 2021



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LIST OF APPENDICES

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LIST OF ACRONYMS

°F	degrees Fahrenheit
µg/m ³	micrograms per cubic meter
AB	Assembly Bill
ADA	Americans with Disabilities Act
AEP	Association of Environmental Professionals
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
AST	aboveground storage tank
AVL	Automatic Vehicle Location
BMP	Best Management Practice
CAAQS	California Ambient Air Quality Standards
CalGEM	California Geologic Energy Management Division
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERS	California Environmental Reporting System
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH ₄	methane
CHRIS	California Historical Resources Information System
City	City of San Jose
CMP	Congestion Management Program
CMU	concrete masonry units
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
DOSD	California Division of Safety of Dams

DOT	Department of Transportation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
ft	feet or foot
GHG	greenhouse gas
H ₂ S	hydrogen sulfide
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HI	Hazard Index
HMBP	Hazardous Materials Business Plan
hr	hour
HRA	Health Risk Assessment
Hz	Hertz
IGP	Industrial General Permit
In/sec	inches per second
IS	Initial Study
kWh	kilowatt-hours
lbs or lb	pounds
LID	Low Impact Development
LOS	Level of Service
LSTs	Localized Significance Thresholds
MEIR	Maximum Exposed Individual Resident
MEIW	Maximum Exposed Individual Worker
MIP	Monitoring Implementation Program
mmBtu	million British thermal units
MRZ	mineral resource zone
MT/yr	metric tonnes per year
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NEC	No Exposure Certification
NO ₂	nitrogen dioxide
NOI	Notice of Intent
NONA	Notice of Non-Applicability
NOx	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
PM ₁₀	particulate matter with aerodynamic diameter of 10 microns or less
PM _{2.5}	particulate matter with aerodynamic diameter of 2.5 microns or less
POL	petroleum, oil, and lubricant
PPD	Precise Plan of Design
ppm	parts per million
PPV	peak particle velocity
PTC	Permit to Construct
PTO	Permit to Operate
QISP	Qualified Industrial Stormwater Practitioner
RCNM	Roadway Construction Noise Model
SJFD	San Jose Fire Department

RMS	root mean square
SFBAAB	San Francisco Bay Area Air Basin
SJMWS	San Jose Municipal Water System
SJPD	San Jose Police Department
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SIC	Standard Industrial Classification
SMARA	Surface Mining and Reclamation Act of 1975
SMARTS	Stormwater Multiple Application and Report Tracking System
SO ₂	sulfur dioxide
SO _x	oxides of sulfur
SPCC	Spill Prevention, Control, and Countermeasure
SSC	species of special concern
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	Toxic Air Contaminants
TIA	Traffic Impact Analysis
TMDL	Total Maximum Daily Load
tpd	tons per day
tpy	tons per year
UMWP	Urban Water Management Plan
US	United States
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VMT	vehicle miles traveled
VOC	volatile organic compound
WQMP	Water Quality Management Plan

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Appendix C

Noise Analysis

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Delivering Solutions
Improving Lives

Noise Impact Analysis – 1675 Monterey Road, San Jose, CA Off Site Parking Lot

March 25, 2021

Prepared For:

Bradley Cardon

Dear Mr. Cardon,

NV5 is pleased to present the Noise Impact Analysis for the off-site parking lot located at 1675 Monterey Road, San Jose, CA. Please refer to the report for our findings and conclusions.

If you have any questions, please contact Cecile Felsher at (310) 756-9693 or by email at cecile.felsher@nv5.com.

For and on behalf of NV5,



Cecile Felsher, CIH

Senior Consultant

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1 INTRODUCTION

1.1 Noise Impact Study Purpose and Objectives

This noise impact analysis was completed to evaluate the potential noise impacts and identify possible noise mitigation measures associated with the off-site parking lot located 1675 Monterey Road in San Jose, CA. This study evaluates the long-term noise impacts of the site on the sensitive receptors located near the site.

1.2 Facility Description and Operations

The proposed site is an off-site parking northeast of a delivery station that will serve as a parking lot for delivery vehicles. The off-site parking lot is located at 1675 Monterey Road, San Jose, CA 95112 and under the jurisdiction of the city of San Jose, CA. The site is located in a Heavy Industrial zoning district and surrounded by other like properties as well as commercial and residential properties. The site is bounded by commercial and residential properties to the north and south, Monterey Road to the east, and Pomona Avenue to the west. Barnard Avenue and San Jose Avenue are located approximately 170-270 feet south and north of the site, respectively. Approximately 2,800 feet east are train tracks and Highway 87 (Guadalupe Freeway). Exhibit A indicates the location of the facility.

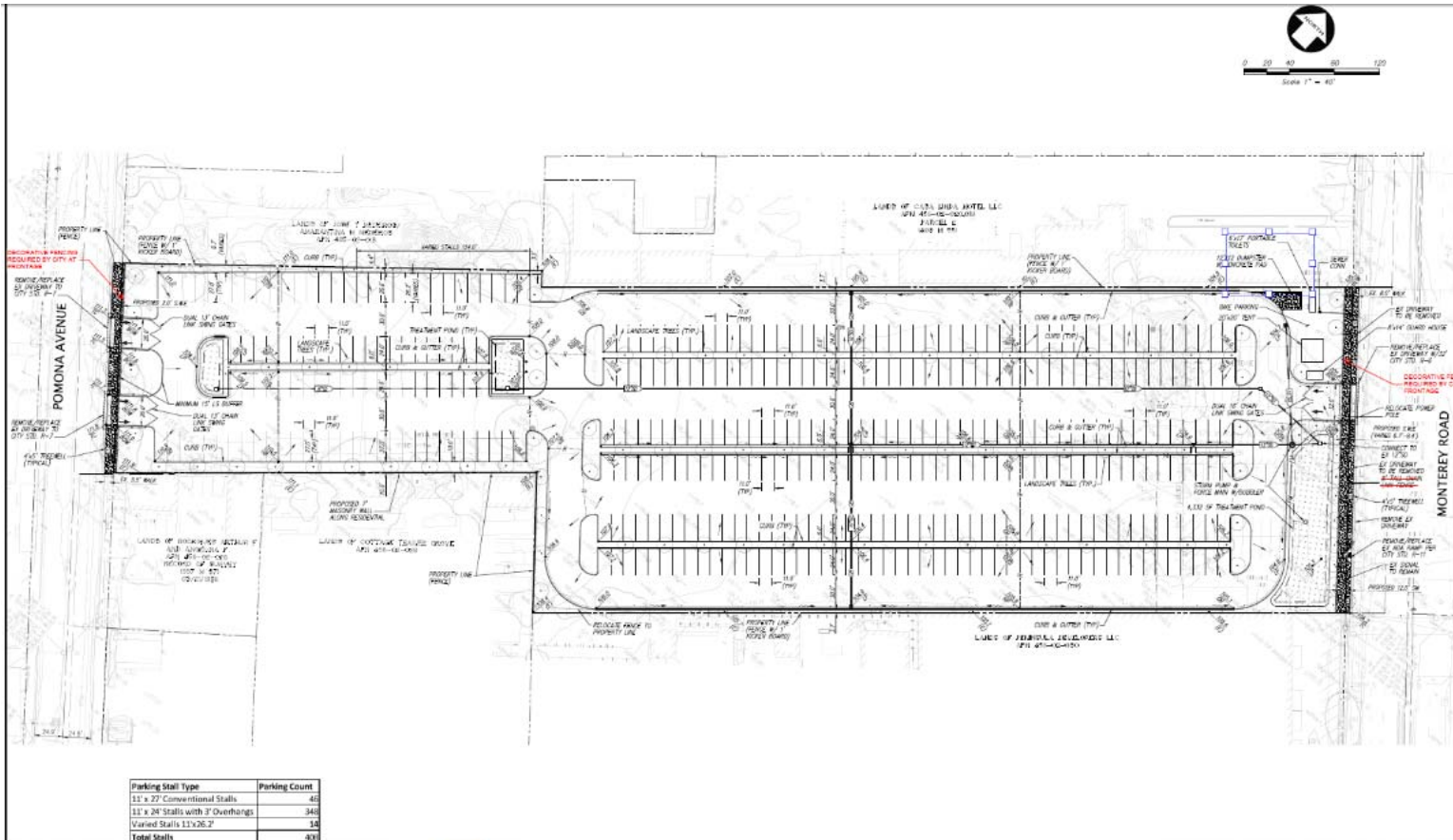
Land use surrounding the property is mixed. There are similar industrial and commercial businesses located north, south, east, and west of the site. Cottage Trailer Grove mobile home park, Sands Motel, Casa Linda Hotel, and California Motel are located southwest, south, north, southeast of the site, respectively. There are single-family homes approximately 630 feet north of the site. The closest sensitive receptors are the mobile home park and Casa Linda Hotel, which both share a property boundary line with the proposed site.

Based on the site Concept Plan (Exhibit B), the facility will consist of employee car spaces (personal vehicles for van drivers), van maintenance spaces, and van parking spaces. The site will be accessible via two driveways off Pomona Avenue west of the site and Monterey Road east of the site.

Exhibit A – Project Location



Exhibit B – Off-Site Parking Lot Concept Plan



Parking Stall Type	Parking Count
11' x 27' Conventional Stalls	48
11' x 24' Stalls with 3' Overhangs	348
Varied Stalls 11'x26.2'	18
Total Stalls	414

2 FUNDAMENTALS OF NOISE

2.1 Sound, Noise and Acoustics

Sound is a mechanical radiant energy that is transmitted by longitudinal pressure waves in a material medium, such as air in the case of traffic and stationary noise, and is the objective cause for human hearing. Sound is technically described in terms of the loudness (amplitude) and frequency (pitch) of the sound. Noise is defined as an unwanted sound.

2.2 Frequency

When sound travels through air, the atmospheric pressure varies periodically. The number of pressure variations per second is called the frequency of sound and is measured in Hertz (Hz) which is defined as cycles per second. Our hearing systems are not equally sensitive to all sound frequencies. Thus, not all frequencies are perceived as being equally loud at the same sound pressure level, and when calculating overall environmental noise ratings it is necessary to consider sounds at some frequencies as more impactful than those at other frequencies. Low-frequency sounds are low in pitch (bass sounding) and high-frequency sounds are high in pitch (squeak). The human ear can hear from a bass pitch starting at 20 Hz all the way to the high pitch of 20,000 Hz.

2.3 Sound Pressure Levels and Decibels

Sound pressure level (SPL or Lp) is a logarithmic measure of the effective pressure of a sound relative to a reference value. The sound pressure levels are measured in decibels abbreviated dB. The human ear is not equally sensitive to sound at all frequencies. The “A-weighted scale,” abbreviated dBA, reflects the normal hearing sensitivity range of the human ear. On this scale, the range of human hearing extends from approximately 3 to 140 dBA. Exhibit C provides examples of A-weighted noise levels from common sounds.

Exhibit C – A-weighted common noise level scale

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet fly-over at 1000 feet	— 110 —	Rock band
Gas lawn mower at 3 feet	— 100 —	
Diesel truck at 50 feet at 50 mph	— 90 —	Food blender at 3 feet Garbage disposal at 3 feet
Noisy urban area, daytime	— 80 —	Vacuum cleaner at 10 feet Normal speech at 3 feet
Gas lawn mower, 100 feet Commercial area	— 70 —	
Heavy traffic at 300 feet	— 60 —	Large business office Dishwasher next room
Quiet urban daytime	— 50 —	
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime	— 30 —	Library Bedroom at night, concert
Quiet rural nighttime	— 20 —	Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

dBA = A-weighted decibels; mph = miles per hour
Source: California Department of Transportation, *Technical Noise Supplement*, September 2013.

2.4 Addition of Decibels

Because decibels are on a logarithmic scale, sound pressure levels cannot be added or subtracted by simple plus or minus addition. To add two or more noise levels, if the difference between the highest and next highest noise level is: 0–1 dB then add 3 dB to the higher level to give the total noise level, 2–3 dB then add 2 dB to the higher level to give the total noise level, 4–9 dB then add 1 dB to the higher level to give the total noise level, 10 dB and over, then the noise level is unchanged (i.e. the higher level is the total level)

2.5 Human Response to Changes in Noise Levels

In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, and it perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. For purposes of this report as well as with most environmental documents, overall sound levels are determined by applying frequency weighted adjustments to spectral sound levels. The A-scale weighting scale is used to mimic human hearing response, so sound is reported in terms of A-weighted decibels (dBA). Typically, the human ear can barely perceive a change in noise level of 3 dB. A change in noise level of 5 dB is readily perceptible, and a change of 10 dB is perceived as being twice or half as loud.

2.6 Sound Propagation

Sound is transmitted in air by pressure variations from its source to the surroundings. Sound levels will decrease as the distance between the source and the receiver increases. While absorption by air is one of the factors attributing to the weakening of a sound during transmission, distance plays a more important role in noise reduction during transmission. Depending on the source of the sound for every doubling of distance the level will be reduced between 3 and 6 dB. The reduction of a sound is called attenuation.

Other factors for noise attenuation are ground absorption and shielding. Noise models use hard site (reflective surfaces) and soft site (absorptive surfaces) to help calculate predicted noise levels. Hard site conditions assume no excessive ground absorption between the noise source and the receiver. Soft site conditions such as grass, soft dirt or landscaping attenuate noise at a rate of an additional 1.5 dB per doubling of distance.

In order to break the line of sight, walls between a noise source and a receiver are often used for noise attenuation to reduce the noise levels at the receiver. Additional barriers such as buildings, hills and heavy vegetations can also reduce the noise levels. Typically, walls will reduce noise levels by 5-10 dB. The higher the wall is, the higher the noise reduction will be.

2.7 Measurement of Sound

There are many ways to evaluate noise measured over periods of time. Equivalent continuous sound level (Leq) is the total sound energy measured over a stated period of time. LAs(Max) is the maximum level with A-weighted frequency response and slow time constant. The Community Noise Equivalent Level (CNEL) is the LAeq (equivalent noise level) over a 24-hour

period with a penalty of 5 dB for noises occurring from 7:00 a.m. to 10:00 p.m. and a penalty of 10 dB for noises occurring from 10:00 p.m. to 7:00 a.m. The noise penalty is added to the noise events during the evening and nighttime hours when individuals are more sensitive to noise.

3 COMMUNITY NOISE STANDARDS

3.1 City of San Jose General Plan

The City of San Jose General Plan Environmental Considerations / Hazards section provides goals and policies to incorporate safety considerations into the City’s planning and decision-making processes to reduce risks in hazardous areas. The Noise section (EC-1.1-14) provides information on the existing noise environment and includes goals, objectives, policies, and implementation programs to ensure an acceptable noise environment. Relevant sections are as follows:

EC-1.1

The City’s acceptable exterior noise level objective is 60 dBA DNL or less for residential and most institutional land uses (Table EC-1). The acceptable exterior noise level objective is established for the City, except in the environs of the San José International Airport and the Downtown.

For new multi-family residential projects and for the residential component of mixed-use development, use a standard of 60 dBA DNL in usable outdoor activity areas, excluding balconies and residential stoops and porches facing existing roadways. Some common use areas that meet the 60 dBA DNL exterior standard will be available to all residents. Use noise attenuation techniques such as shielding by buildings and structures for outdoor common use areas. On sites subject to aircraft overflights or adjacent to elevated roadways, use noise attenuation techniques to achieve the 60 dBA DNL standard for noise from sources other than aircraft and elevated roadway segments.

For single family residential uses, use a standard of 60 dBA DNL for exterior noise in private usable outdoor activity areas, such as backyards.

Exhibit D – Table EC-1: Land Use Compatibility Guidelines for Community Noise in San Jose

Table EC-1: Land Use Compatibility Guidelines for Community Noise in San José

LAND USE CATEGORY	EXTERIOR NOISE EXPOSURE (DNL IN DECIBELS (DBA))					
	55	60	65	70	75	80
1. Residential, Hotels and Motels, Hospitals and Residential Care ¹						
2. Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds						
3. Schools, Libraries, Museums, Meeting Halls, Churches						
4. Office Buildings, Business Commercial, and Professional Offices						
5. Sports Arena, Outdoor Spectator Sports						
6. Public and Quasi-Public Auditoriums, Concert Halls, Amphitheaters						

¹Noise mitigation to reduce interior noise levels pursuant to Policy EC-1.1 is required.

Normally Acceptable:

- Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable:

- Specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features included in the design.

Unacceptable:

- New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

E.C-1.2

Minimize the noise impacts of new development on land uses sensitive to increased noise levels (Categories 1, 2, 3 and 6) by limiting noise generation and by requiring use of noise attenuation measures such as acoustical enclosures and sound barriers, where feasible. The City considers significant noise impacts to occur if a project would:

- Cause the DNL at noise sensitive receptors to increase by five dBA DNL or more where the noise levels would remain “Normally Acceptable”; or
- Cause the DNL at noise sensitive receptors to increase by three dBA DNL or more where noise levels would equal or exceed the “Normally Acceptable” level

E.C-1.3

Mitigate noise generation of new nonresidential land uses to 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses.

E.C-1.9

Require noise studies for land use proposals where known or suspected loud intermittent noise sources occur which may impact adjacent existing or planned land uses. For new residential development affected by noise from heavy rail, light rail, BART or other single-event noise sources, implement mitigation so that recurring maximum instantaneous noise levels do not exceed 50 dBA Lmax in bedrooms and 55 dBA Lmax in other rooms.

3.2 City of San Jose Noise Ordinance

Noise level requirements are included in the City of San Jose Noise Control Ordinance Chapter 10.16. Relevant requirements from the ordinance are as follows:

Section 10.16.010 (Disturbing the peace prohibited)

No person shall disturb the peace, quiet and comfort of any neighborhood by creating therein any disturbing or unreasonably loud noise.

Section 10.16.020 (Disturbing noises designated)

The following types of noises are declared to be disturbing to the peace, quiet and comfort of the neighborhood in which they are heard, and persons creating such noises are in violation of Section 10.16.010:

1. The sounding of any horn, signal or noise device on any automobile, motorcycle, bus, truck or other vehicle, in any other manner or for any other purpose than allowed by the California Vehicle Code or other laws of the state;
2. The noise from an exhaust system of any vehicle which is not equipped or constructed so as to prevent any disturbing or unreasonably loud noise;
3. The revving of the engine of any motor vehicle while such vehicle is not in motion, except when done in the course of repairing, adjusting or testing it.

Section 10.16.110 (Responses to disturbances)

Whenever a police officer at the scene warns any responsible party present to discontinue the disturbance, the responsible party shall be liable for the actual cost of each subsequent response required for a disturbance within twelve hours of the first response. At the first response, the responding police officer shall give an oral and/or written warning to one or more of the responsible parties present that the disturbance must cease immediately, and that if a

second or subsequent response to the disturbance is required within twelve hours following such notice, a response fee shall be charged to any responsible party for all responses after the first response.

3.3 City of San Jose Zoning Ordinance

Noise requirements for Industrial Zoning Districts, for the City of San Jose, are included in Chapter 20-50. Relevant requirements from the ordinance are as follows:

20.50.300 (Performance Standards)

The sound pressure level generated by any use or combination of uses shall not exceed the decibel level at any property line except upon issuance and in compliance with a special use permit. Maximum noise levels in decibels (dB) at property lines are as follows:

- Industrial use adjacent to a property used or zoned for residential purposes: 55 dB
- Industrial use adjacent to a property used or zoned for commercial purposes: 60 dB
- Industrial use adjacent to a property used or zoned for industrial or use other than commercial or residential purposes: 70 dB

3.4 Noise Significance Thresholds

The proposed project would have a significant impact related to operational noise if:

- The DNL at noise sensitive receptors is increased by five dBA DNL or more where the noise levels would remain “Normally Acceptable”; or
- The DNL at noise sensitive receptors is increased by three dBA DNL or more where noise levels would equal or exceed the “Normally Acceptable” level
- New nonresidential land uses cause noise levels to be above 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses.
- Industrial property adjacent to a property used or zoned for residential purposes causes noise levels to be above 55 dBA

The zoning ordinance noise limits are defined in dB. However, dBA is the more common unit of measurement for noise because it reflects the normal hearing sensitivity range of the human ear. We therefore advise that noise significance threshold be in dBA.

4 EXISTING AMBIENT NOISE ENVIRONMENT

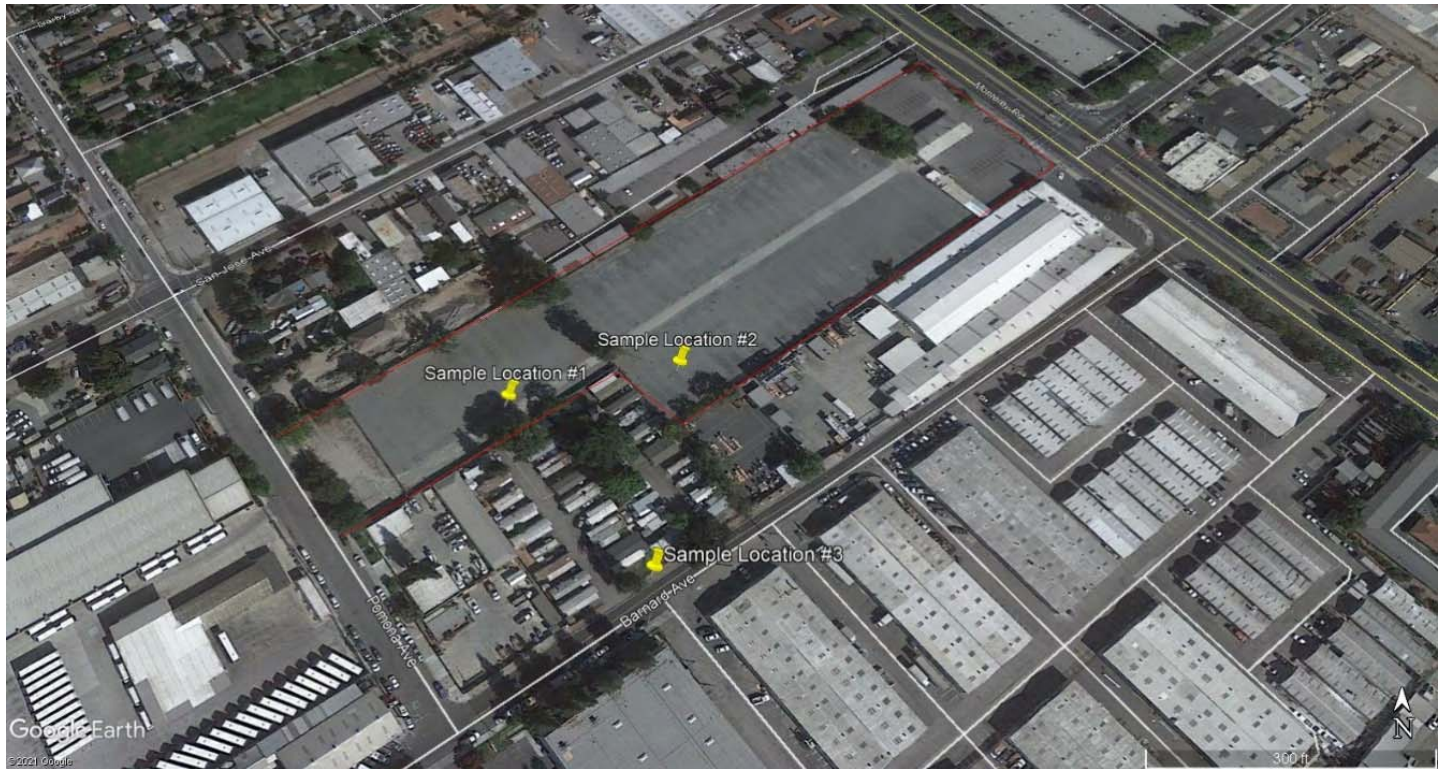
Ambient Noise or background levels are the all-encompassing noises associated with a given environment at a specific time, usually a composite of sound from many sources from many directions, near and far without any dominant sound. The primary existing noise sources in the proposed off-site parking lot area are manufacturing noises from surrounding properties, traffic noises from surrounding roads, and animal noises.

NV5 took ambient noise level measurements at three locations near and within the boundary of the site as indicated on Exhibit D. Short-term (10 and 30 minutes) measurements were made during daytime and evening hours on March 16, 2021. The noise measurements were taken at times when vans would be active at the property once the off-site parking would be active.

Location #1 was the southwestern portion of the proposed site (which at the time of sampling was unpaved open space); north of the Cottage Trailer Grove mobile home park. Location #2 was another location in the southwestern portion of the proposed site, but more eastern compared with Location #1; northwest of Glencore Recycling. Location #3 was south of the Cottage Trailer Grove mobile home park near Barnard Avenue.

Measurements taken at Locations #1 and #3 are representative of the ambient noise levels at the mobile home park. Location #2 measurements are most representative of ambient noise levels at Casa Linda Hotel (located north of the proposed site).

Exhibit E – Ambient Noise Measurement Location



All the measurements were conducted using a Larson Davis 831 Sound Level Meter (SLM). The SLM was calibrated before and after each measurement of noise levels; the measurement was made using the A-weighting scale, the SLM was placed 5 feet off the ground. 10-minute and 30-minute samples were taken and analyzed with Leq.

Table 1 - Summary of Short-Term Noise Measurements (dBA)

ID	Sample Location	Sampling Date	Sample Time	Description	Leq (dBA)	LSmax (dBA)
1	1675 Monterey Road, San Jose, CA 95112	3/16/2021	10:02 a.m.-10:32 a.m.	Noise from birds, dogs, airplanes, trucks, automobiles, motorcycles, machinery/industrial equipment, loudspeakers	57.5	72.7
		3/16/2021	7:00 p.m. - 7:30 p.m.	Noise from birds, dogs, airplanes, trucks, automobiles, motorcycles, machinery/industrial equipment	55.5	73.0
2	1675 Monterey Road, San Jose, CA 95112	3/16/2021	10:42 a.m. - 11:12 a.m.	Noise from birds, airplanes, trucks, automobiles, machinery/industrial equipment	60.7	75.4
3	111 Barnard Ave, San Jose, CA 95112	3/16/2021	11:35 a.m. - 11:45 a.m.	Noise from birds, airplanes, trucks, automobiles, pedestrians, machinery/industrial equipment	61.5	74.8

dBA = A-weighted decibels
 Leq = equivalent continuous level over a period of 10 or 30 minutes
 LS max = maximum level and slow time constant over a period of 10 or 30 minutes

5 FUTURE COMMUNITY NOISE IMPACTS

The potential noise impacts on the community would be associated with stationary sources on operating on the project site. Motor vehicle noise on public streets is often considered as part of the ambient noise; when vehicles enter a private site, they are considered as part of the site’s noise sources. The vans and van drivers’ cars activities on site could affect the closest sensitive receptors.

The impact evaluation of the project was performed using SoundPlan Essential 5.1, an environmental noise propagation computer program that was developed to assist with noise propagation calculations for major noise sources and projects. The program calculates the sound pressure level at a location utilizing the sound emission properties of the source(s) and environmental propagation factors (sound spreading due to distance, ground affects, barriers, topography, as well as, atmospheric attenuation). The program also includes a number of standardized methodologies that can be utilized to quantify the acoustic effect of these environmental factors. The specific standard employed by this program is that described in the ISO standard 9613 “Acoustics - Attenuation of sound during propagation outdoors”. The modeled ambient temperature was 10 degrees C (50 degrees F) and the assumed relative humidity (RH) was 70 percent. The ground absorption value utilized in the model was 0 (for hard ground), which is conservatively representative of the land at the site. No sound attenuation due to foliage was included in this analysis. A 7ft wall about 530ft long was modeled at the property line between the site and the mobile home.

This study evaluates the acoustical impact of the proposed off-site parking lot on the adjacent sensitive receptors and compares it to the ambient noise levels and local noise standard to assess if any mitigation measure would be necessary to reduce the noise exposure to the

community. Future community noise impacts were modeled using SoundPlan Essentials 5.1 acoustical modeling software. This study focuses on the daytime and nighttime noise levels in order to determine the acoustical impact of the site on the closest receivers.

5.1 Noise Sources

The main noise sources are trucks entering and leaving the site during the day and at night. Based on the traffic count provided (Appendix C), the following are the noise sources on site:

Daytime (7am-10pm):

- One hundred and fifty-one (151) van drivers will enter the site between the hours of 9:00 a.m. and 11:30 a.m. They will drop off their cars and pick up a van at the off-site parking lot. After the deliveries, the van drivers will drive the vans back to the parking lot and leave with their cars between the hours of 7 p.m. and 10 p.m. One hundred and fifty-one (151) vans will be leaving the site between the hours of 10:00 a.m. and 12:00 p.m. and returning to the site between the hours of 7 p.m. and 10 p.m.

Noise sources were entered in the system as octave band sound power levels based on reference noise levels measured at delivery station facility with similar vans. In the van queuing and loading area, NV5 took measurements of 20 vans at the queuing area and 20 vans at the loading area to represent the reference noise levels for vans which included turning on the engine, closing doors and backup alarms. It also represents noises typical van parking lot noises.

One area source was placed over the entire parking lot to represent the noise from vans. The vans departure and arrival will be staggered within three hours.

The van drivers' car parking was represented by a parking area over the entire parking lot. The noises associated with parking of vehicles that are accounted for in the model include engine ignition, vehicle doors opening and closing. The traffic volume of the parking lot is entered with the number of moves per parking bay (in and out are each considered a single move), the hour (for the time slices day and night) and the number of parking bays.

The model predicted the maximum noise levels produced by the vans and car activities using expected noise sources from vans, and cars. The sources were modeled as operating at the same time to represent the worst-case scenario.

Tables 2 and 3 list the sources that were considered in the analyses and Exhibit E shows the locations of noise sources and the proposed building.

Table 2 - Source Sound Power Levels in Octave Band Format (dBA, re 10-12W)

Source name	Level (dBA)	Octave Band Centre Frequency (Hz), Sound Power Levels (dBA)							
		63	125	250	500	1,000	2,000	4,000	8,000
Van Parking	99.4	81.1	86.5	87.6	88	94.4	94.3	90.5	85.1

Table 3 - Source Sound Power Levels – Parking Lots

Name	Size		Movements per hour		Road surface	Lw,ref (dBA)
			Day	Night		
Van Driver Parking	408	Parking bays	0.37	0	Asphaltic driving lanes	95.6

5.2 Sensitive Receivers

Sensitive receivers that may be affected by the proposed off-site parking are the mobile homes south of the site and the Casa Linda Motel located northeast of the site. A total of four (4) receivers were modeled to evaluate the proposed project’s operational noise impact. The location of these receivers is denoted by yellow and green dots on Exhibit F. Receiver 1 and 2 are receivers located at the Casa Linda Motel. Receiver 3 is a mobile home located at the southeast border between the site and the mobile home park and Receiver 4 was placed at a mobile home located at the southwest border between the site and the mobile home park.

Exhibit G shows the estimated worst case noise level contours for daytime (7 a.m. to 10 p.m.). Predicted noise levels are anticipated to range between 33.5 and 39.4 at the Casa Linda Motel and to range between 49.5 and 51.0 dBA during the daytime at the mobile home park.

Table 4 displays the results of the noise level predictions with all the sources being active at the same time.

Table 4 - Receiver Predicted Noise Levels

			Ambient Noise Levels (dBA)	Predicted noise levels (dBA)	Combined noise levels (dBA)	Difference between Ambient and Combined (dB)	Ambient noise levels higher than the predicted noise levels?
No.	Receiver name	Floor	Day	Day	Day	Day	Day
1	Casa Linda Motel - NE	GF	57.5	33.5	57.5	0.0	Yes
2	Casa Linda Motel - SW	GF	57.5	39.4	57.6	0.1	Yes
3	Mobile Home Park - SE	GF	57.5	51.0	58.4	0.9	Yes
4	Mobile Home Park - SW	GF	57.5	49.5	58.1	0.6	Yes

¹ Ambient Noise Levels are based on the noise measurements taken by NV5 on March 16, 2021. The measurements were 10 and 30min Leq measurements.

² Combined noise levels are ambient noise levels combined with predicted noise levels. It represents the noise levels that would be measured once the noise sources are operational.

Exhibit F – Project Site, Operations Noise Level Projection

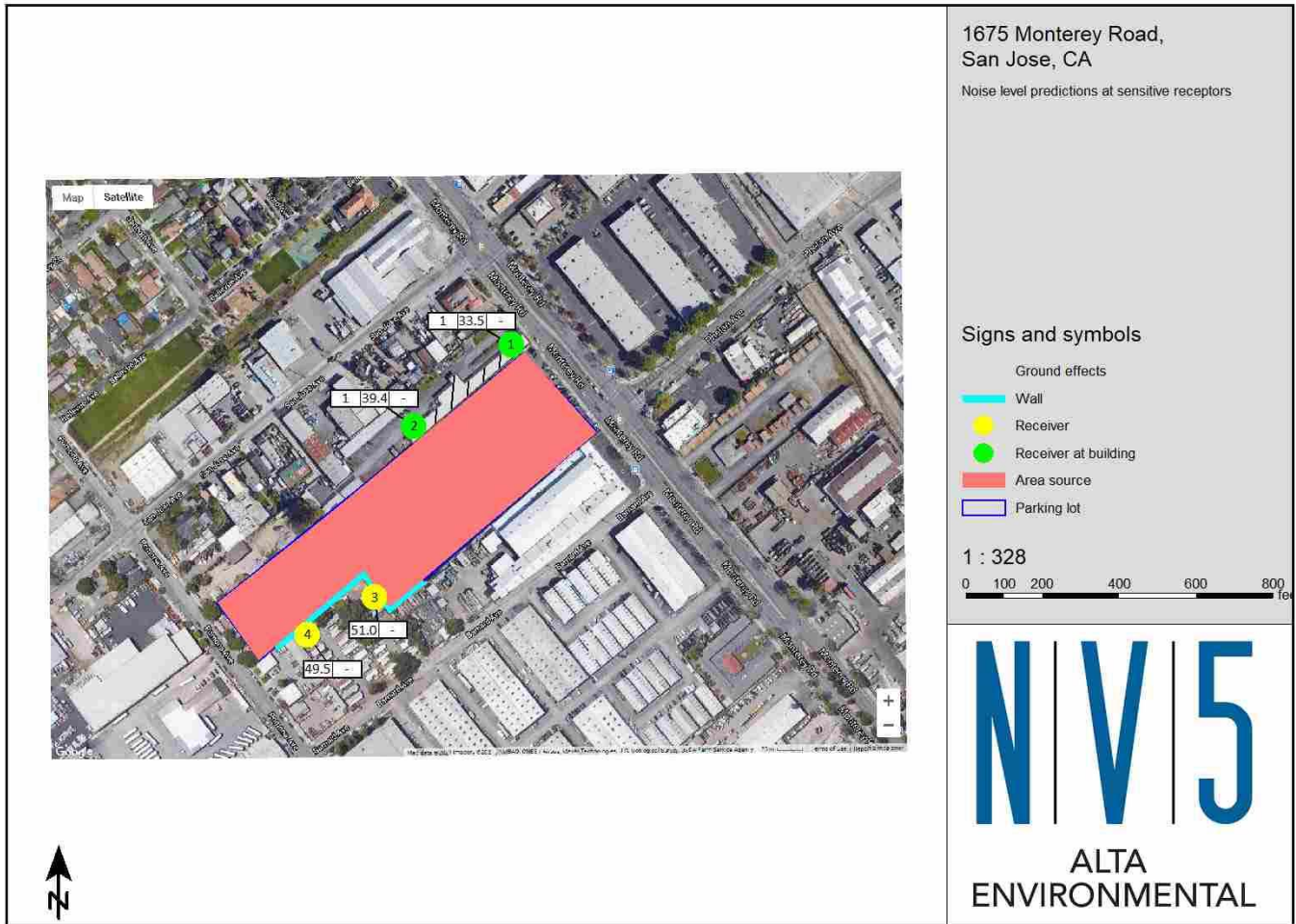
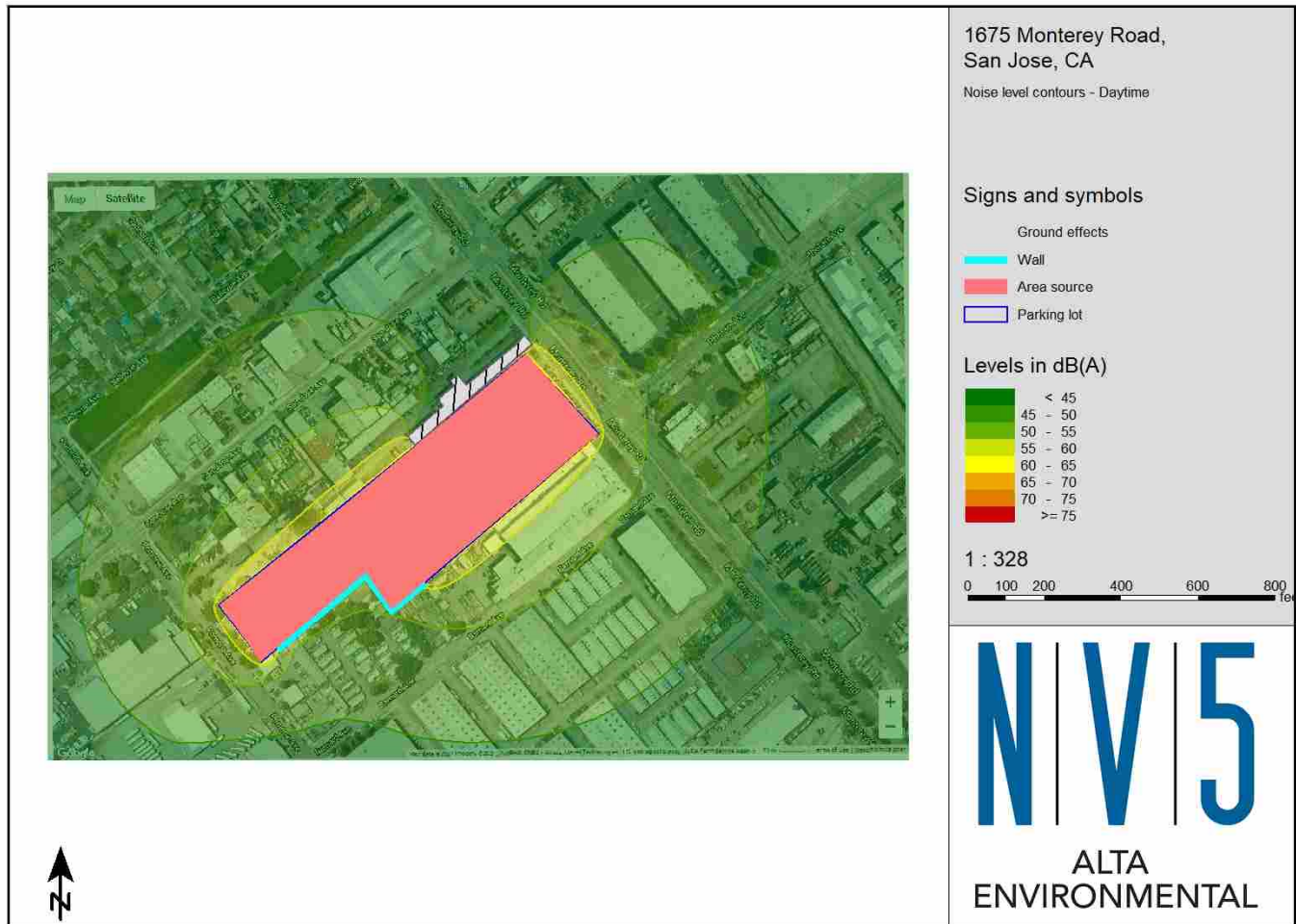


Exhibit G – Project Site, Operations Noise Level Contours (Daytime)



6 RECOMMENDATIONS

As discussed above, the proposed project would have a significant impact related to operational noise if:

- The DNL at noise sensitive receptors is increased by five dBA DNL or more where the noise levels would remain “Normally Acceptable”; or
- The DNL at noise sensitive receptors is increased by three dBA DNL or more where noise levels would equal or exceed the “Normally Acceptable” level
- New nonresidential land uses cause noise levels to be above 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses.
- Industrial property adjacent to a property used or zoned for residential purposes causes noise levels to be above 55 dBA

The ambient noise levels (Leq) were measured to be 57.5 dBA during daytime. The predicted noise levels for the Casa Linda Motel are expected to be between 33.5 and 39.4dBA during the day. The predicted noise levels for the residential receivers are expected to be between 49.7 and 51.2 dBA during the day when vans and cars are parking at the parking lot with a 7ft wall between the site and the residential properties (about 530 feet long, see Exhibit F for the location of the wall). This wall is required by the city due to the parking lot being adjacent to a residential property.

The predicted noise levels being below the ambient noise levels, the site’s activities are not expected to increase the existing noise levels by more than 3dB. In addition, the predicted noise levels are expected to be below 55dBA at the residential property line.

Based on this conservative noise impact analysis, the proposed off-site parking is not expected to cause a significant acoustical impact on the residences south of the site.

7 MITIGATION MEASURE

A 7ft sound wall is already included as part of the current concept plan for the site, additional mitigations measures will not be necessary for this site with the current concept plan.

8 **REFERENCES**

- City of San Jose General Plan - Environmental Considerations / Hazards EC-1
- City of San Jose Noise Control Ordinance - Chapter 10.16
- City of San Jose Zoning Ordinance - Chapter 20-50 Industrial Zoning Districts

APPENDIX A – Ambient Noise Measurements

Noise Measurement Field Data			
Project:	1675 Monterey Road, San Jose, CA	Project Number:	713121-2021001.29
Sample Name:	Sample location #1, Daytime	Date:	03/16/21
Analyst:	Nicholas Poser	Time:	10:02 – 10:32
Location:	Southwest portion of proposed site; ~24 feet from fence in the middle of paved path		
Noise Sources:	Birds, dogs, airplanes, trucks, automobiles, motorcycles, machinery/industrial equipment, loudspeakers		
Comments:	Consistent sounds from machinery at nearby recycling plant, birds chirping, dogs barking, light traffic in distance, occasional truck moving, muffler, honk, or back up alarm in distance, occasional airplane flies overhead. Loudspeaker announcement from 10:24-10:25.		

Results (dBA):		
Leq:	Ls(min):	Ls(max):
57.5	47.6	72.7

Equipment		Weather	
Sound Level Meter:	SoundAdvisor™ Model 831C	Temperature (°F):	49°F
Calibrator:	CAL200	Wind (MPH):	4 mph SSE
Response Time:	Slow	Sky:	Sunny
Weighting:	A weighting	Barometric Pressure:	N/A
Microphone Height:	5' feet	Humidity:	66%

Photo:



Noise Measurement Field Data			
Project:	1675 Monterey Road, San Jose, CA	Project Number:	713121-2021001.29
Sample Name:	Sample location #1, Evening	Date:	03/16/21
Analyst:	Nicholas Poser	Time:	19:00 – 19:30
Location:	Southwest portion of proposed site; ~24 feet from fence in the middle of paved path		
Noise Sources:	Birds, dogs, airplanes, trucks, automobiles, motorcycles, machinery/industrial equipment		
Comments:	Consistent sounds from machinery at nearby recycling plant, birds chirping, dogs barking, medium traffic in distance, occasional truck moving, honk, or muffler in distance, occasional airplane flies overhead. Loud crash at 19:07		

Results (dBA):		
Leq:	Ls(min):	Ls(max):
55.5	49.0	73.0

Equipment		Weather	
Sound Level Meter:	SoundAdvisor™ Model 831C	Temperature (°F):	55°F
Calibrator:	CAL200	Wind (MPH):	9 mph NNW
Response Time:	Slow	Sky:	Sunny
Weighting:	A weighting	Barometric Pressure:	N/A
Microphone Height:	5' feet	Humidity:	54%

Photo:



Noise Measurement Field Data

Project:	1675 Monterey Road, San Jose, CA	Project Number:	713121-2021001.29
Sample Name:	Sample location #2, Daytime	Date:	03/16/21
Analyst:	Nicholas Poser	Time:	10:42 – 11:12
Location:	Southwestern portion of proposed site; ~60 feet from SW fence and ~75 feet from SE fence (tangent to recycling center)		
Noise Sources:	Birds, airplanes, trucks, automobiles, machinery/industrial equipment		
Comments:	Consistent sounds from machinery at nearby recycling plant, birds chirping, light traffic in distance, occasional truck moving, muffler, honk, or back up alarm in distance, occasional airplane flies overhead. High pitch beep at 11:03.		

Results (dBA):

Leq:	Ls(min):	Ls(max):
60.7	57.1	75.4

Equipment		Weather	
Sound Level Meter:	SoundAdvisor™ Model 831C	Temperature (°F):	51°F
Calibrator:	CAL200	Wind (MPH):	3 mph SE
Response Time:	Slow	Sky:	Sunny
Weighting:	A weighting	Barometric Pressure:	N/A
Microphone Height:	5' feet	Humidity:	61%

Photo:



Noise Measurement Field Data			
Project:	1675 Monterey Road, San Jose, CA	Project Number:	713121-2021001.29
Sample Name:	Sample location #3, Daytime	Date:	03/16/21
Analyst:	Nicholas Poser	Time:	11:35 – 11:45
Location:	South of Cottage Trailer Grove mobile home park; ~5 feet from fence and ~3 feet from Barnard Avenue		
Noise Sources:	Birds, airplanes, trucks, automobiles, pedestrians, machinery/industrial equipment		
Comments:	Consistent sounds from machinery at nearby recycling plant, birds chirping, light to moderate traffic in distance, occasional truck moving, siren, car door closing, or engine starting, occasional airplane flies overhead. Pedestrians talking at 11:41.		

Results (dBA):		
Leq:	Ls(min):	Ls(max):
61.5	53.9	74.8

Equipment		Weather	
Sound Level Meter:	SoundAdvisor™ Model 831C	Temperature (°F):	N/A
Calibrator:	CAL200	Wind (MPH):	N/A
Response Time:	Slow	Sky:	Sunny
Weighting:	A weighting	Barometric Pressure:	N/A
Microphone Height:	5' feet	Humidity:	N/A

Photo:



APPENDIX B – SoundPlan Essential – Contributions

Contribution Levels of the Receivers

Source name		Level	
		Day	Night
		dB(A)	
Casa Linda Motel - NE	GF	33.5	0.0
Van Driver Parking		30.1	-
Van Parking		30.8	-
Casa Linda Motel - SW	GF	39.4	0.0
Van Driver Parking		35.9	-
Van Parking		36.9	-
Mobile Home Park - SE	GF	51.0	0.0
Van Driver Parking		45.9	-
Van Parking		49.4	-
Mobile Home Park - SW	GF	49.5	0.0
Van Driver Parking		44.5	-
Van Parking		47.9	-

APPENDIX C – Trip Generation Count

	Associates			Trucks			DSP Drivers			DSP Vans			Total		
Time	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00	0	0	0	0	0	0	11	0	11	0	0	0	11	0	11
9:30	0	0	0	0	0	0	43	0	43	0	0	0	43	0	43
10:00	0	0	0	0	0	0	53	0	53	0	32	32	53	32	85
10:30	0	0	0	0	0	0	37	0	37	0	64	64	37	64	101
11:00	0	0	0	0	0	0	7	0	7	0	32	32	7	32	39
11:30	0	0	0	0	0	0	0	0	0	0	23	23	0	23	23
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	8	8	8	0	8	8	8	16
19:30	0	0	0	0	0	0	0	16	16	40	0	40	40	16	56
20:00	0	0	0	0	0	0	0	56	56	32	0	32	32	56	88
20:30	0	0	0	0	0	0	0	30	30	52	0	52	52	30	82
21:00	0	0	0	0	0	0	0	36	36	14	0	14	14	36	50
21:30	0	0	0	0	0	0	0	5	5	5	0	5	5	5	10
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	151	151	302	151	151	302	302	302	604