ADDENDUM TO THE VALLEY FAIR SHOPPING CENTER EXPANSION PROJECT
FINAL ENVIRONMENTAL IMPACT REPORT (SCH # 2006052162),
AND ADDENDA THERETO

Pursuant to Section 15162 of the CEQA Guidelines, the City of San José has determined that the project described below is pursuant to or in furtherance of the Valley Fair Shopping Center Expansion Project Final Environmental Impact Report (EIR) described below and does not involve new significant effects beyond those analyzed in this Final EIR (FEIR). Therefore, the City of San José can take action on the project as being within the scope of the certified FEIR.

FILE NUMBER, NAME, PROJECT DESCRIPTION AND LOCATION

File No. HA06-027-05. Westfield Valley Fair Expansion. Site Development Permit Amendment to allow two standby emergency generators at a regional shopping center (Westfield Valley Fair Mall) on a 70 gross acre site.


The environmental impacts of this project were addressed by a FEIR entitled, "Valley Fair Shopping Center Expansion Project (SCH # 2006052162)" and findings were adopted by City Council under Resolution No. 73809 on June 5, 2007. Specifically, the following impacts were reviewed and found to be adequately considered by the EIR:

- Land Use
- Transportation and Traffic
- Noise
- Air Quality
- Cultural Resources
- Biological Resources
- Geology
- Hydrology & Water Quality
- Hazards and Hazardous Materials
- Visual and Aesthetics
- Utilities & Service Systems
- Energy

ANALYSIS

The purpose of this Addendum is to evaluate the environmental impacts of the installation of two standby, back-up emergency generators in addition to a third generator intended to remain on the Westfield Valley Fair Mall site.

In April 2007, the City of San José certified the FEIR for the Valley Fair Shopping Center Expansion Project and approved the Site Development Permit (H06-027) that allowed for a 650,000 square foot expansion of the existing shopping center with two new anchor stores and small retail outlets on a 70-acre site. This project was approved but has yet to be fully implemented.

An analysis was prepared for this project to compare the impacts of the proposed incremental change with the approved project. This analysis only addresses those resource areas (air quality and noise) which would be potentially affected by the proposed changes to the approved project. The proposed project would not alter the analysis in the 2007 FEIR and Addenda thereto with regard to other resources areas, such as hazardous materials, hydrology, public services, and transportation. This is because the overall development capacity, site operations, and vehicle trips generated by the project would remain the same as the approved project evaluated in the 2007 FEIR and Addenda thereto.
Given the proposed project description and knowledge of the project site based on the proposed project, site-specific environmental review, and environmental review prepared for the Valley Fair Shopping Center Expansion FEIR, the City of San José has concluded that the proposed project would not result any new significant effects beyond those analyzed in the FEIR. The project will neither include any new impacts not previously disclosed in the Valley Fair Shopping Center Expansion Project FEIR; nor would it result in a substantial increase in the magnitude of any significant environmental impact previously identified in the FEIR. For these reasons, a supplemental or subsequent FEIR is not required and an addendum to the Valley Fair Shopping Center Expansion Project FEIR has been prepared for the proposed project.

Pursuant to Section 15162 this addendum will not be circulated for public review, but will be attached to the 2007 Valley Fair Shopping Center Expansion Project FEIR.

Environmental Project Manager
Kринjal Mathur

Rosalynn Hughey, Interim Director
Planning, Building and Code Enforcement

1/25/18
Date

Attachment: Westfield Valley Fair Expansion Addendum, January 2018
Addendum

to the Final Environmental Impact Report
for the Valley Fair Shopping Center Expansion Project
(SCH# 2006052162), and Addenda thereto

Westfield Valley Fair
Expansion

City of San José File No. HA06-027-05

Prepared by the

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

January 2018
1.0 PURPOSE OF ADDENDUM

The California Environmental Quality Act (CEQA) recognizes that between the date an environmental document is certified and the date the project is fully implemented, one or more of the following changes may occur: 1) the project may change; 2) the environmental setting in which the project is located may change; 3) laws, regulations, or policies may change in ways that impact the environment; and/or 4) previously unknown information can arise. Before proceeding with a project, CEQA requires the Lead Agency to evaluate these changes to determine whether or not they affect the conclusions in the environmental document.

The purpose of this Addendum is to evaluate the environmental impacts of the installation of two standby, back-up emergency generators on the mall site.

1.1 PREVIOUS ENVIRONMENTAL REVIEW AND APPROVALS

In April 2007, the City of San José certified the Final Environmental Impact Report (EIR) for the Valley Fair Shopping Center Expansion Project (State Clearinghouse number, or SCH# 2006052162, “2007 Valley Fair FEIR”) and approved the Site Development Permit (H06-027) that allowed for a 650,000 square foot expansion of the existing shopping center with two new anchor stores and small retail outlets on a 70-acre site. The Valley Fair Shopping Center straddles the cities of San José and Santa Clara, with 52 acres in the City of San José and 18 acres in the City of Santa Clara. This project was approved but has yet to be fully implemented.

Two amendments to the Site Development Permit (HA06-027-01 and HA06-027-02) were approved in the year 2013 to allow reconstruction of parking structures on the northeast corner of the site and construction of a 60-foot tall pole-mounted LED billboard sign. A subsequent amendment (HA06-027-03) was approved in 2015 to allow demolition of two on-site banks, reconstruction of one bank within the City of San José, and associated removal of landscape trees. A 2015 EIR Addendum was processed for HA06-027-03. A 2016 Addendum was processed for multiple Site Development Permit Amendment applications (San Jose File No. HA06-027-04; Santa Clara File No. PLN2015-10898) submitted by Westfield LLC to demolish two retail stores and internal mall space to accommodate construction of approximately 685,000 square feet of net new retail space (including a 10-theater cinema), underground parking, and a new six-story parking structure. The environmental review for these permits was completed through separate addenda to the 2007 Valley Fair FEIR. Details of these permits approved by the City of San José are available at www.sjpermits.org.

An application was also submitted to the City of Santa Clara in 2015 to construct a new bank building and remove trees near the Macy’s Men’s entrance from Stevens Creek Boulevard (City of Santa Clara File No. PLN2015-11187). The application was approved by the Santa Clara Architectural Review Committee on June 24, 2015. Environmental review for construction of that bank was provided by the 2007 Valley Fair FEIR.
1.2 SUBSEQUENT ENVIRONMENTAL REVIEW

CEQA Guidelines §15162 states that when an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

   a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

   b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;

   c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

   d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

CEQA Guidelines §15164 states that the lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in §15162 (above) calling for preparation of a subsequent EIR have occurred.

Given the proposed project description, as modified, and knowledge of the project site, and site-specific environmental review completed through this EIR Addendum, the City of San José has concluded that the proposed project would not result in any new impacts not previously disclosed in the aforementioned EIR; nor would it result in a substantial increase in the magnitude of any significant environmental impact previously identified in the EIR. For these reasons, a supplemental or subsequent EIR is not required and an EIR Addendum has been prepared for the proposed project.
1.3 AVAILABILITY OF THE ADDENDUM

This addendum will not be circulated for public review, but will be attached to the 2007 Valley Fair Shopping Center Expansion Project EIR, pursuant to CEQA Guidelines §15164(c).

2.0 DESCRIPTION OF THE PROPOSED CHANGES TO THE PROJECT

Section 2.2 describes the project as most recently approved in 2016. Section 2.8 describes the proposed changes to the previously approved project.

2.1 PROJECT LOCATION

The approximately 70-acre project site is located in west San José and east Santa Clara. Approximately 18 acres of the western portion of the site are located in the City of Santa Clara, while the remaining 52 acres are within the City of San José. The rectangular-shaped site is located on Stevens Creek Boulevard, bounded by Monroe Street and U.S. Interstate 880 to the east, Forest Avenue and single-family housing to the north, and North Winchester Boulevard and commercial development to the west. The Santana Row mixed-use development is south of the project site across Stevens Creek Boulevard.

Figure 1 provides a regional map of the project site, and Figure 2 shows an aerial photograph with surrounding land uses.

2.2 SUMMARY OF APPROVED PROJECT

The majority of the development would occur on portions of the site in the City of San José and would include a new 150,000 square foot three-level anchor store (anticipated to be a Bloomingdale’s) at the southern end of the site along with a 475,000 square foot expansion of the existing interior mall. Other construction proposed for the San José portion of the site includes a new restaurant structure with an event deck, outdoor patio seating, and common space. The maximum height of the proposed structures would be 65 feet above ground.

On the 18 acres of the site located in the City of Santa Clara, Westfield will construct a 98,000 square foot three-story building containing approximately 25,000 square feet of internal mall retail space, a lounge, and a 10-theater cinema on the upper levels.
To accommodate the expansion, the project includes demolition of the Global Den and Sports Authority buildings in the northwest quadrant of the site within Santa Clara, both the Bank of America and Chase Bank buildings in San José (refer to Section 1.1 above), and the three-level parking structure at the southern end of the site closest to Stevens Creek Boulevard, directly behind the two existing banks to be removed. Small-scale demolition of existing interior mall space will also occur. The approved site plan is shown in Figure 3.

2.3 PROPERTY OWNER/PROPOSENENT

Westfield LLC
Scot Vallee, Senior Vice President, Development
111 Sutter Street, Suite 800
San Francisco, CA 94104
(415) 391-9800

2.4 LEAD AGENCY CONTACT

City of San José
Department of Planning, Building, and Code Enforcement
200 East Santa Clara Street, Tower - third floor
San José, CA 95113-1905

Krinjal Mathur, Environmental Review Project Manager

Email: krinjal.mathur@sanjoseca.gov
Phone: (408) 535-7874

2.5 ASSESSOR’S PARCEL NUMBERS

274-43: -035, -037, -040, -043, -046, -048, -055, -059, -061, -062, -065, -066, -068, -069, -070, -071, -072, -073, -075, -076, -077, -078, -079, -080, -081

2.6 GENERAL PLAN LAND USE DESIGNATION AND ZONING DESIGNATION

2.6.1 City of San José Designations (52 acres)

General Plan: Regional Commercial
Zoning: CG - Commercial General
Other: Valley Fair/Santana Row Urban Village
2.7 Proposed Project Changes

The project proposes a new Site Development Permit Amendment request by Westfield for a portion of the site in San Jose to permit two standby emergency generators not previously authorized by prior Site Development Permit Amendments.

*Back-up Emergency Generators*

Once completed, the mall expansion would include mechanical equipment, such as backup emergency generators. Testing of the generators is anticipated to occur during daytime hours, in compliance with the Zoning Ordinance. Emergency use of the generators is anticipated to be infrequent and would also likely occur during daytime hours, when the mall is operational. Under future project conditions, a new 600 kilowatt (kW) generator would be installed and an existing 300 kW generator would be replaced with a new 800 kW generator, which would be located as shown in Figure 4 below. Additionally, an existing 400 kW generator, also shown in Figure 4, would remain under future conditions.
New 800kW Generator replaces existing 300kW that serves existing mall load and will serve additional load in the Expansion.

Existing 400kW Generator serving load in the existing mall & Parking Deck E to remain.

New 600kW Generator to serve load in the Expansion, Parking Deck H, and fire pump.
3.0 ENVIRONMENTAL IMPACTS OF THE PROPOSED CHANGES TO THE PROJECT

The discussion below describes the environmental impacts of the modified 2017 project compared to the impacts of the approved project, as addressed in the 2007 FEIR and Addenda thereto. Also noted are any changes that have occurred in the environmental setting that would result in new impacts or impacts of greater severity than those identified in the previously certified FEIR. This Addendum only addresses those resource areas (air quality and noise) which would be potentially affected by the proposed changes to the approved 2016 project.

The proposed modifications to the approved 2016 project would not alter the analysis in the 2007 FEIR and Addenda thereto with regard to other resources areas, such as hazardous materials, hydrology, public services, and transportation. This is because the overall development capacity, site operations, and vehicle trips generated by the project would remain the same as the approved project evaluated in the 2007 FEIR and Addenda thereto.

3.1 AIR QUALITY

The change to the 2007 project relevant to air quality is the placement of two new emergency back-up diesel generators in addition to a third generator intended to remain. The placement of two new diesel generators would be a source of toxic air contaminant (TAC) emissions that could potentially affect nearby sensitive receptors (e.g., housing). TACs are a group of pollutants with varying degrees of toxicity that are known to cause morbidity or mortality. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor exhaust. Cars and trucks release at least 40 different toxic air contaminants. The most important, in terms of health risk, are diesel particulate, benzene, formaldehyde, 1,3-butadiene and acetaldehyde. Extensive construction, and the equipment associated with it, can also be a substantial source of TAC emissions. TACs are found in ambient air and because chronic exposure can result in adverse health effects, they are regulated at the regional, state, and federal level.

This project does not propose to alter the nature of the overall construction activity, and therefore this Addendum does not evaluate any change in construction emissions and all previously identified mitigation measures MM AQ 1.1 to 1.4 from the 2016 Addendum prepared in connection with San José Site Development Permit Amendment File No. HA06-027-04, would still be required.

3.1.1 Findings of the Previously Certified FEIR

The 2007 FEIR did not disclose that the mall expansion project would generate TACs apart from construction activities, as no stationary sources of TACs were proposed for operation.
3.1.1.1  **Air Quality Effects of the Modified Project**

*Project Operational Toxic Air Contaminants*

Under future project conditions, a new 600 kW generator would be installed and an existing 300 kW generator would be replaced with a new 800 kW generator, which would be located as shown in Figure 4 above. Additionally, an existing 400 kW generator, also shown in Figure 4, would remain under future conditions. The two proposed emergency back-up generators, along with a third existing generator, would rely on diesel as a fuel source and therefore emit diesel particulate matter and various other TACs. Testing of the generators is anticipated to occur monthly for several hours, not to exceed 50 hours per year per engine. Emergency use of the generators is anticipated to be infrequent. Emergency back-up generators using diesel as a fuel source require a permit to operate from the Bay Area Air Quality Management District (BAAQMD). As part of the BAAQMD permit, the generators are evaluated to identify the health risk they would pose to nearby sensitive receptors and any operational or other controls necessary to ensure they do not exceed BAAQMD health risk standards. The project has received a BAAQMD permit to construct the proposed new 800 kW generator\(^1\), and will ultimately be required to obtain a permit to operate both new generators prior to being put into service on the site. As part of receiving a permit to operate, BAAQMD will verify the TACs emitted during regular monthly testing of each generator will not exceed BAAQMD health risk standards.

\(^1\) BAAQMD Authority to Construct for Permit Application No. 28226, Plant No. 19470, issued November 17, 2016.
3.2 NOISE

The following discussion is based on a Noise Report prepared by Illingworth & Rodkin, Inc., and is provided as Appendix A.

3.2.1 Findings of the Previously Certified FEIR

3.2.1.1 Noise Impacts of the Approved Project

During the project’s construction process, numerous pieces of construction equipment will be placed on site and trucks will make frequent trips to and from the project site. As such, the noise analysis completed for the Valley Fair FEIR assumed construction noise would be limited to daytime hours (7:00 a.m. to 7:00 p.m. weekdays) and no construction on weekends for any construction within 500 feet of a residence. Subject to these restrictions, the EIR concluded the impacts from construction activity would be less than significant.

3.2.2 Noise Effects of the Modified Project

Back-up Emergency Generators Noise Analysis

Chapter 20.40.600 of the City’s Zoning Ordinance limits instantaneous noise levels from commercial uses at residential property lines to 55 dBA unless a special use permit is issued to authorize noise levels in excess of the performance standard. The three generators (one new, one replacement, and one existing to remain) were modeled to show the potential noise exposure of the emergency generators at the nearby noise-sensitive receptors. According to the manufacturer’s specifications for the proposed generators, noise levels for each generator would be approximately 78 dBA at a distance of 23 feet. Noise contours of all three emergency generators operating simultaneously are shown in Figure 5. The future parking garage, which is included in the model, would provide some additional shielding for the surrounding noise-sensitive receptors.

As shown in Figure 5, the emergency generators would produce noise levels at or below 55 dBA L_eq at the surrounding noise-sensitive receptors. Operation of the emergency generators would be occasional for monthly testing. Generator noise would also be below the range of daytime and nighttime hourly average noise levels at nearby noise sensitive receptors; therefore, the day-night average noise level would not increase at the property line of these sensitive receptors due to operation of the emergency generators. Therefore, the project would not result in operational noise impacts that would exceed what was disclosed in the 2007 FEIR.
Hourly Average Leq for Emergency Generator Noise

Noise level, Leq in dB(A)
- <= 50
- 50 < <= 55
- 55 < <= 60
- 60 < <= 65
- 65 < <= 70
- 70 < <= 75
- 75 <

Signs and symbols:
- Point Source
- Building
4.0 CONCLUSION

Based on the above analysis and discussion, no substantive revisions are needed to the 2007 FEIR, because no new significant impacts or impacts of substantially greater severity would result from the modified project. There have been no changes in circumstance in the project area that would result in new significant environmental impacts or substantially more severe impacts, and no new information has come to light that would indicate the potential for new significant impacts or substantially more severe impacts than were discussed in the 2007 FEIR. Therefore, no further evaluation is required, and no Subsequent EIR is needed pursuant to State CEQA Guidelines Section 15162, and an EIR Addendum has therefore appropriately been prepared, pursuant to Section 15164.

Pursuant to CEQA Guidelines Section 15164(c), this Addendum need not be circulated for public review, but will be included in the public record file for the 2007 Valley Fair Shopping Center Expansion Project FEIR.
Appendix A
WESTFIELD VALLEY FAIR MALL
EXPANSION PROJECT
GENERATOR NOISE ASSESSMENT

SAN JOSÉ, CALIFORNIA

January 23, 2017

♦ ♦ ♦ ♦

Prepared for:
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INTRODUCTION

The Westfield Valley Fair Mall Expansion Project includes the expansion of the existing mall and the construction of a plaza, a 3-story anchor store, and a 6-story parking structure. As part of this project, the existing emergency generators would be replaced with larger capacity equipment. This report evaluates the project’s potential to result in excessive operational noise from generators at surrounding noise sensitive land uses. The report is divided into two sections: 1) the Setting Section provides a brief description of the fundamentals of environmental noise, summarizes applicable regulatory criteria, and provides measurements made in the project vicinity that are used to represent existing ambient conditions at nearby receptors; and 2) the Mechanical Equipment Noise Analysis Section considers the effects on existing nearby receptors when the proposed emergency generators are operating.

SETTING

Fundamentals of Environmental Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its pitch or its loudness. Pitch is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. Loudness is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A decibel (dB) is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

There are several methods of characterizing sound. The most common in California is the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called $L_{eq}$. The most common averaging period is hourly, but $L_{eq}$ can describe any series of noise events of arbitrary duration.
The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level* (CNEL) is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The *Day/Night Average Sound Level* (DNL or $L_{dn}$) is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

**Effects of Noise**

**Sleep and Speech Interference**

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for single- and multi-family dwellings are set by the State of California at 45 dBA DNL. Typically, the highest steady traffic noise level during the daytime is about equal to the DNL and nighttime levels are 10 dBA lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses. Typical structural attenuation is 12 to 17 dBA with open windows. With closed windows in good condition, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer dwelling. Sleep and speech interference is, therefore, possible when exterior noise levels are about 57 to 62 dBA DNL with open windows and 65 to 70 dBA DNL if the windows are closed. Levels of 55 to 60 dBA are common along collector streets and secondary arterials, while 65 to 70 dBA is a typical value for a primary/major arterial. Levels of 75 to 80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need to be able to have their windows closed; those facing major roadways and freeways typically need special glass windows.

**Annoyance**

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that the causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The DNL as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be
disagreement about the relative annoyance of these different sources. When measuring the percentage of the population highly annoyed, the threshold for ground vehicle noise is about 50 dBA DNL. At a DNL of about 60 dBA, approximately 12 percent of the population is highly annoyed. When the DNL increases to 70 dBA, the percentage of the population highly annoyed increases to about 25 to 30 percent of the population. There is, therefore, an increase of about 2 percent per dBA between a DNL of 60 to 70 dBA. Between a DNL of 70 to 80 dBA, each decibel increases by about 3 percent the percentage of the population highly annoyed. People appear to respond more adversely to aircraft noise. When the DNL is 60 dBA, approximately 30 to 35 percent of the population is believed to be highly annoyed. Each decibel increase to 70 dBA adds about 3 percentage points to the number of people highly annoyed. Above 70 dBA, each decibel increase results in about a 4 percent increase in the percentage of the population highly annoyed.
### TABLE 1  Definition of Acoustical Terms Used in this Report

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decibel, dB</td>
<td>A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.</td>
</tr>
<tr>
<td>Sound Pressure Level</td>
<td>Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e. g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.</td>
</tr>
<tr>
<td>Frequency, Hz</td>
<td>The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.</td>
</tr>
<tr>
<td>A-Weighted Sound Level, dBA</td>
<td>The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.</td>
</tr>
<tr>
<td>Equivalent Noise Level, Leq</td>
<td>The average A-weighted noise level during the measurement period.</td>
</tr>
<tr>
<td>L&lt;sub&gt;max&lt;/sub&gt;, L&lt;sub&gt;min&lt;/sub&gt;</td>
<td>The maximum and minimum A-weighted noise level during the measurement period.</td>
</tr>
<tr>
<td>L&lt;sub&gt;01&lt;/sub&gt;, L&lt;sub&gt;10&lt;/sub&gt;, L&lt;sub&gt;50&lt;/sub&gt;, L&lt;sub&gt;90&lt;/sub&gt;</td>
<td>The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.</td>
</tr>
<tr>
<td>Day/Night Noise Level, L&lt;sub&gt;Dn&lt;/sub&gt; or DNL</td>
<td>The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.</td>
</tr>
<tr>
<td>Community Noise Equivalent Level, CNEL</td>
<td>The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.</td>
</tr>
<tr>
<td>Ambient Noise Level</td>
<td>The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.</td>
</tr>
<tr>
<td>Intrusive</td>
<td>That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.</td>
</tr>
</tbody>
</table>

# TABLE 2  Typical Noise Levels in the Environment

<table>
<thead>
<tr>
<th>Common Outdoor Activities</th>
<th>Noise Level (dBA)</th>
<th>Common Indoor Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jet fly-over at 1,000 feet</td>
<td>110 dBA</td>
<td>Rock band</td>
</tr>
<tr>
<td>Gas lawn mower at 3 feet</td>
<td>100 dBA</td>
<td></td>
</tr>
<tr>
<td>Diesel truck at 50 feet at 50 mph</td>
<td>90 dBA</td>
<td>Food blender at 3 feet</td>
</tr>
<tr>
<td>Noisy urban area, daytime</td>
<td>80 dBA</td>
<td>Garbage disposal at 3 feet</td>
</tr>
<tr>
<td>Gas lawn mower, 100 feet</td>
<td>70 dBA</td>
<td>Vacuum cleaner at 10 feet</td>
</tr>
<tr>
<td>Commercial area</td>
<td></td>
<td>Normal speech at 3 feet</td>
</tr>
<tr>
<td>Heavy traffic at 300 feet</td>
<td>60 dBA</td>
<td>Large business office</td>
</tr>
<tr>
<td>Quiet urban daytime</td>
<td>50 dBA</td>
<td>Dishwasher in next room</td>
</tr>
<tr>
<td>Quiet urban nighttime</td>
<td>40 dBA</td>
<td>Theater, large conference room</td>
</tr>
<tr>
<td>Quiet suburban nighttime</td>
<td>30 dBA</td>
<td>Library</td>
</tr>
<tr>
<td>Quiet rural nighttime</td>
<td>20 dBA</td>
<td>Bedroom at night, concert hall (background)</td>
</tr>
<tr>
<td></td>
<td>10 dBA</td>
<td>Broadcast/recording studio</td>
</tr>
<tr>
<td></td>
<td>0 dBA</td>
<td></td>
</tr>
</tbody>
</table>

Source: Technical Noise Supplement (TeNS), California Department of Transportation, November 2009.
Regulatory Background

The proposed project would be subject to noise-related regulations, plans, and policies established within documents prepared by the City of San José. These documents are implemented during the environmental review process to limit noise exposure at existing noise-sensitive land uses. Applicable planning documents include the City of San José General Plan and Municipal Code.

**City of San José General Plan.** The Environmental Leadership Chapter in the Envision San José 2040 General Plan sets forth policies with the goal of minimizing the impact of noise on people through noise reduction and suppression techniques, and through appropriate land use policies in the City of San José. The following policies are applicable to the proposed project:

**EC-1.6** Regulate the effects of operational noise from existing and new industrial and commercial development on adjacent uses through noise standards in the City’s Municipal Code.

**City of San José Municipal Code.** The City’s Municipal Code contains a Zoning Ordinance that limits noise levels at adjacent properties. Chapter 20.30.700 states that sound pressure levels generated by any use or combination of uses on a property shall not exceed 55 dBA at any property line shared with land zoned for residential use, except upon issuance and in compliance with a Conditional Use Permit. The code is not explicit in terms of the acoustical descriptor associated with the noise level limit. However, a reasonable interpretation of this standard, which is based on policy EC-1.3 of the City’s General Plan, would identify the ambient base noise level criteria as a day-night average noise level (DNL).

Chapter 20.80.2030 establishes that the standards and criteria for stand-by and backup electrical power generation uses are as follows:

1. Maximum noise levels, based upon a noise analysis by an acoustical engineer, will not exceed the applicable noise standards set forth in this Title.

2. Testing of generators is limited to 7:00 a.m. to 7:00 p.m., Monday through Friday.

Existing Noise Environment

The existing Westfield Valley Fair Mall is located west of I-880 between Stevens Creek Boulevard and Forest Avenue in San José, California. The project site for the mall expansion project is located to the south of the existing mall, just north of Stevens Creek Boulevard. Opposite Stevens Creek Boulevard to the south of the project site are commercial office and retail land uses, and to the south of the commercial uses are single-family residences, mixed-use multi-family residential buildings, and a hotel. To the north of the Westfield Valley Fair Mall, opposite Forest Avenue, are single-family residences.
Noise monitoring was not performed for the proposed project. However, two previous noise monitoring surveys\textsuperscript{1,2} were performed in the project vicinity in February and March of 2016 by Illingworth & Rodkin, Inc. The first monitoring survey was conducted from Wednesday, February 24, 2016 to Friday, February 26, 2016, and included two long-term noise measurements. The second monitoring survey was conducted from Thursday, February 25, 2016 to Tuesday, March 1, 2016, and also included two long-term measurements. Measurement locations are as shown in Figure 1.

The noise environment at sensitive receptors in the vicinity of the project site results primarily from vehicular traffic along Stevens Creek Boulevard and I-880. Local traffic along the neighborhood roadways also contributes to the noise environment.

Long-term noise measurement LT-1 was made in the front yard of 2850 Stevens Creek Boulevard, approximately 140 feet south of the Stevens Creek Boulevard centerline. Hourly average noise levels at this location typically ranged from 65 to 68 dBA $L_{eq}$ during the day, and from 55 to 65 dBA $L_{eq}$ at night. The day-night average noise level from Wednesday, February 24, 2016 to Friday, February 26, 2016 was 69 dBA DNL. The daily trend in noise levels at LT-1 is shown in Figures A1 through A3 of Appendix A.

LT-2 measured noise levels in front yard of the Studios Inn at 348 South Clover Avenue. Hourly average noise levels at this location typically ranged from 56 to 58 dBA $L_{eq}$ during the day, and from 51 to 58 dBA $L_{eq}$ at night. The day-night average noise level from Wednesday, February 24, 2016 to Friday, February 26, 2016 was 62 dBA DNL. Local neighborhood noise was the likely cause of the noise level reaching 64 dBA $L_{eq}$ from 10:00 a.m. to 11:00 a.m. on Friday, February 26, 2016. The daily trend in noise levels at LT-2 is shown in Figures A4 through A6 of Appendix A.

Long-term noise measurement LT-3 was made in front yard of 350 Winchester Boulevard, approximately 65 feet from the Winchester Boulevard centerline. Hourly average noise levels at this location typically ranged from 62 to 73 dBA $L_{eq}$ during the day, and from 55 to 67 dBA $L_{eq}$ at night. The day-night average noise level from Thursday, February 25, 2016 to Tuesday, March 1, 2016 ranged from 69 to 71 dBA DNL. The daily trend in noise levels at LT-3 is shown in Figures A7 through A12 of Appendix A.

LT-4 measured noise levels in the rear of the project site, approximately 130 feet east of the existing building. Hourly average noise levels at this location typically ranged from 59 to 70 dBA $L_{eq}$ during the day, and from 46 to 67 dBA $L_{eq}$ at night. The day-night average noise level from Thursday, February 25, 2016 to Tuesday, March 1, 2016 ranged from 66 to 67 dBA DNL. The daily trend in noise levels at LT-2 is shown in Figures A13 through A18 of Appendix A.

\textsuperscript{1} Illingworth & Rodkin, Inc., “350 Winchester Boulevard Mixed-Use at Santana Row Project Noise and Vibration Assessment,” April 8, 2016.

MECHANICAL EQUIPMENT NOISE ANALYSIS

Once completed, the new parking garage would include mechanical equipment, such as backup emergency generators. Testing of the generators is anticipated to occur during daytime hours, in compliance with the Zoning Ordinance. Emergency use of the generators is anticipated to be infrequent and would also likely occur during daytime hours, when the mall is operational. Chapter 20.30.700 of the City’s Zoning Ordinance limits noise levels at residential property lines 55 dBA DNL, which for a steady noise source would be equivalent to 55 dBA $L_{eq}$ during daytime hours and 45 dBA $L_{eq}$ during nighttime hours.

Under future project conditions, two existing generators (150 kilowatt (kW) and 300 kW) would be replaced with 600 kW and 800 kW generators, which would be located as shown in Figure 2. Additionally, an existing 400 kW generator, also shown in Figure 2, would remain under future conditions. The three generators were modeled in SoundPLAN to show the potential noise exposure of the emergency generators at the nearby noise-sensitive receptors. According to the manufacturer’s specifications for the proposed generators, noise levels for each generator would be approximately 78 dBA at a distance of 23 feet. Noise contours of all three emergency generators operating simultaneously are shown in Figure 3. The future parking garage, which is included in
the SoundPLAN model, would provide some additional shielding for the surrounding noise-sensitive receptors.

As shown in the figure, the emergency generators would produce noise levels at or below 55 dBA L_{eq} at the surrounding noise-sensitive receptors. Since operation of the emergency generators would be occasional, this would result in day-night average noise levels well below the City’s threshold of 55 dBA DNL at the property line of residential land uses. Generator noise would also be below the range of daytime and nighttime hourly average noise levels at nearby noise sensitive receptors; therefore, the day-night average noise level would not increase at the property line of these sensitive receptors due to operation of the emergency generators.

FIGURE 2 Proposed Locations for the Future Emergency Generators
FIGURE 3  Emergency Generator Noise Contours with the Inclusion of the Future Parking Garage
APPENDIX A: Long-Term Noise Level Daily Trends

FIGURE A1  Daily Trend in Noise Levels at LT-1, Wednesday, February 24, 2016

FIGURE A2  Daily Trend in Noise Levels at LT-1, Thursday, February 25, 2016
FIGURE A3  Daily Trend in Noise Levels at LT-1, Friday, February 26, 2016

FIGURE A4  Daily Trend in Noise Levels at LT-2, Wednesday, February 24, 2016
FIGURE A7  Daily Trend in Noise Levels at LT-3, Thursday, February 25, 2016

FIGURE A8  Daily Trend in Noise Levels at LT-3, Friday, February 26, 2016
FIGURE A9 Daily Trend in Noise Levels at LT-3, Saturday, February 27, 2016


FIGURE A12 Daily Trend in Noise Levels at LT-3, Tuesday, March 1, 2016

FIGURE A14 Daily Trend in Noise Levels at LT-4, Friday, February 26, 2016
FIGURE A15 Daily Trend in Noise Levels at LT-4, Saturday, February 27, 2016


FIGURE A18 Daily Trend in Noise Levels at LT-4, Tuesday, March 1, 2016