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6/13/19

**Mayor & Council Members**

**City of Cupertino**

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**Dear Mayor & Council Members,**

**Reference: Public Storage CC 6-18-19 Item #20**

**Subject: Comments and Suggestions**

**Public Storage has done considerable outreach and has attempted to anticipate the impacts of their project. However, since their project will impact the neighboring properties and tenants we feel the following should be considered as a part of the approval process and conditions, Public Storage should be required to do:**

- 1. Have and share a proposed Construction Management Plan with surrounding property owners and tenants prior to submittal to the city for approval. At a minimum, the Construction Management Plan should include the following:**
  - Construction schedule (demolition, grading, construction)**
  - Hours of construction**
  - Location of construction staging and parking**
  - 24-hr contact information (name/telephone number) for inquiries and complaints during construction**
  - To the extent reasonably practical, schedule Public Storage related inbound and outbound construction traffic to minimize the impact on the limited access road from Valley Green Drive and existing users of that access road**
  - Re-occupancy Move in - Develop a plan to orderly re-occupy the existing Public Storage tenants to minimize traffic and parking impacts**
- 2. Provide a minimum two weeks advance notice to surrounding property owners and tenants prior to the start of any construction activity.**
- 3. Maintain all shared access ways/drive aisles clear of any construction debris and equipment. Recondition the existing access roadway from Valley Green Drive for any wear and tear related to the Public Storage construction at the end of the project.**

**4. Post the 24-hr contact information (name/telephone number) at the west and east ends of the site for inquiries and complaints during construction.**

**5. Ensure all Public Storage-related parking (during construction and post-construction) is contained entirely on the project site.**

**Some of these concerns may have been previously addressed or planned for but in the interest of caution we are providing comment to insure all concerns are addressed to the extent possible.**

**Thank you for your consideration,**

**Myron Crawford**

**Cyrah Caburian**

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**From:** Kitty Moore  
**Sent:** Friday, June 14, 2019 1:06 PM  
**To:** Steven Scharf; Liang Chao; Rod Sinks; Darcy Paul; Jon Robert Willey  
**Subject:** Public Storage I 280 Noise Air Pollution  
**Attachments:** Air Quality and Noise Potentials along I-280.pdf

Hi Mayor Scharf, Vice Mayor Chao, and Council Members Sinks, Paul, and Willey,

The Public Storage project will be coming to the CCC. As you are aware, planned developments do not have setback standards. The Public Storage project increased the setback on the south side from around 55' to over 150' and has a small, park-like area outside of the gates. This provides an increased buffer between the townhouses.

The setback on the I-1280 side (north) has been increased and the existing chain link fence will be moved in 12' to accommodate the proposed bike path and provides some design flexibility.

There is a single apartment in the proposed project. It is on the most northwest corner, ground floor, facing the I-280. Having studied the Vallco EIRs, it would seem there would be similar air quality and noise conditions at this location as was found for the Vallco area. I have included a PDF with pertinent excerpts from the Vallco EIR showing the PM 2.5 concentrations and noise contours. I have also included the GP Future Noise Contours map and Land Use Compatibility Figure HS-8. Also find pages of mitigations from the Vallco EIR.

I suggested they install air filtration and perhaps triple pane windows in that one unit due the the proximity to the freeway.

The suggested system for air filtration is MERV-13 or higher, in the Vallco EIR. Additionally, sound-rated windows and doors are suggested in order to keep the indoor noise levels at the acceptable threshold, 45 dBA. I would like to see these mitigation items implemented in the plans.

Thank you,

Draft Environmental Impact Report  
**Vallco Special Area Specific Plan**

SCH# 2018022021

Prepared by



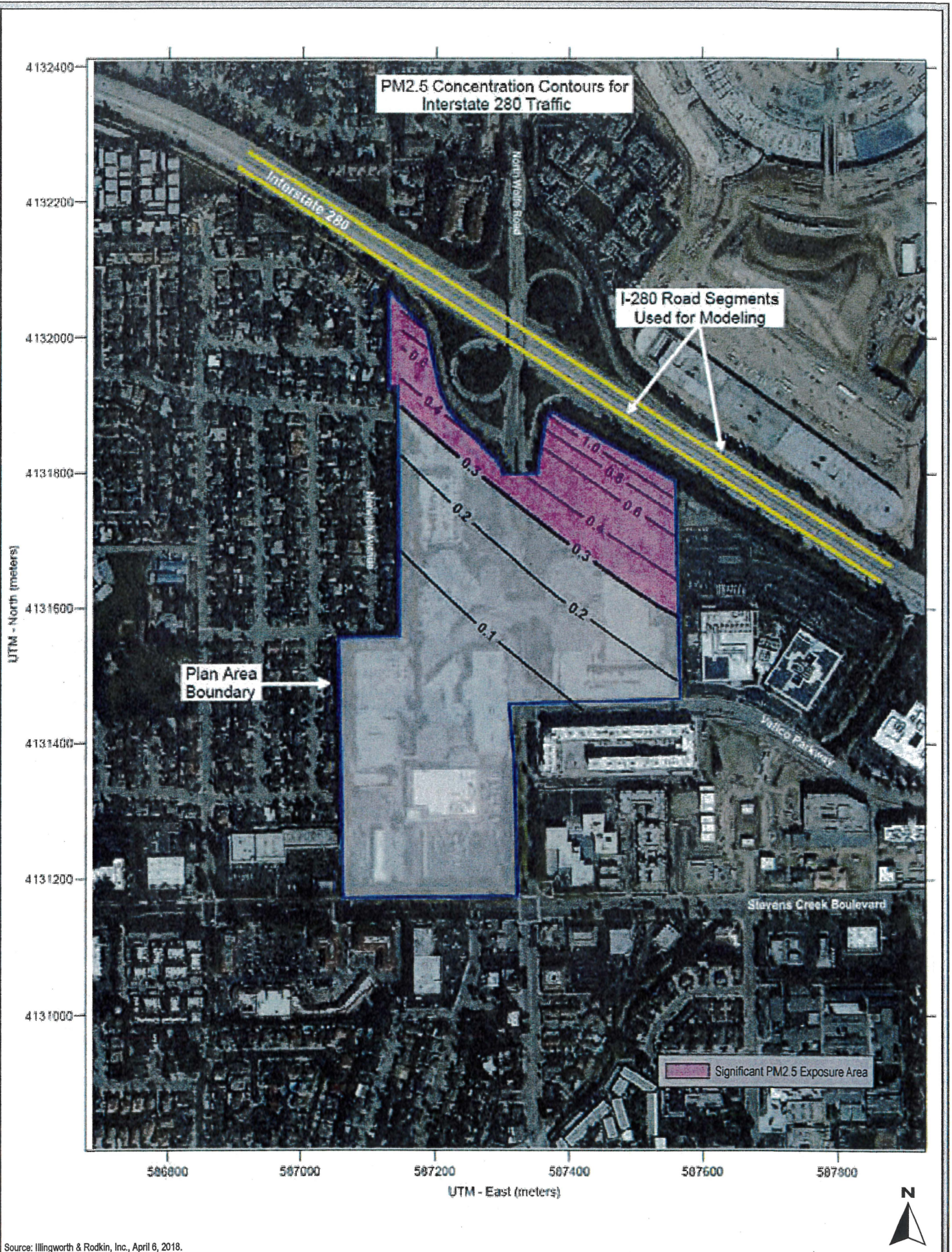
**CUPERTINO**

In Consultation with



**DAVID J. POWERS**  
& ASSOCIATES, INC.

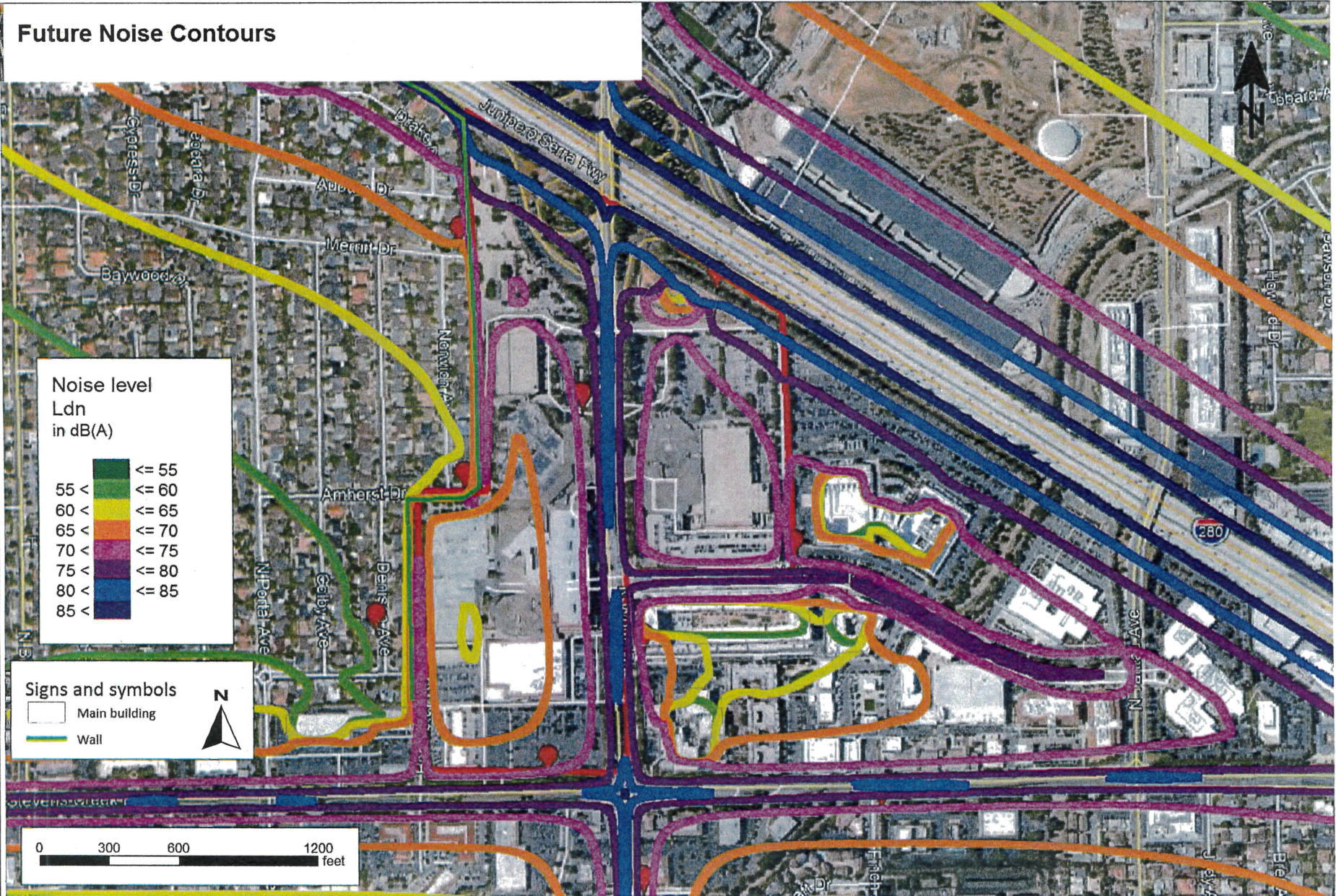
**May 2018**



PROJECT SITE PM2.5 CONCENTRATIONS ( $\mu\text{g}/\text{m}^3$ ) FROM I-280

FIGURE 3.3-1

# Future Noise Contours



Source: Illingworth & Rodkin, Inc.

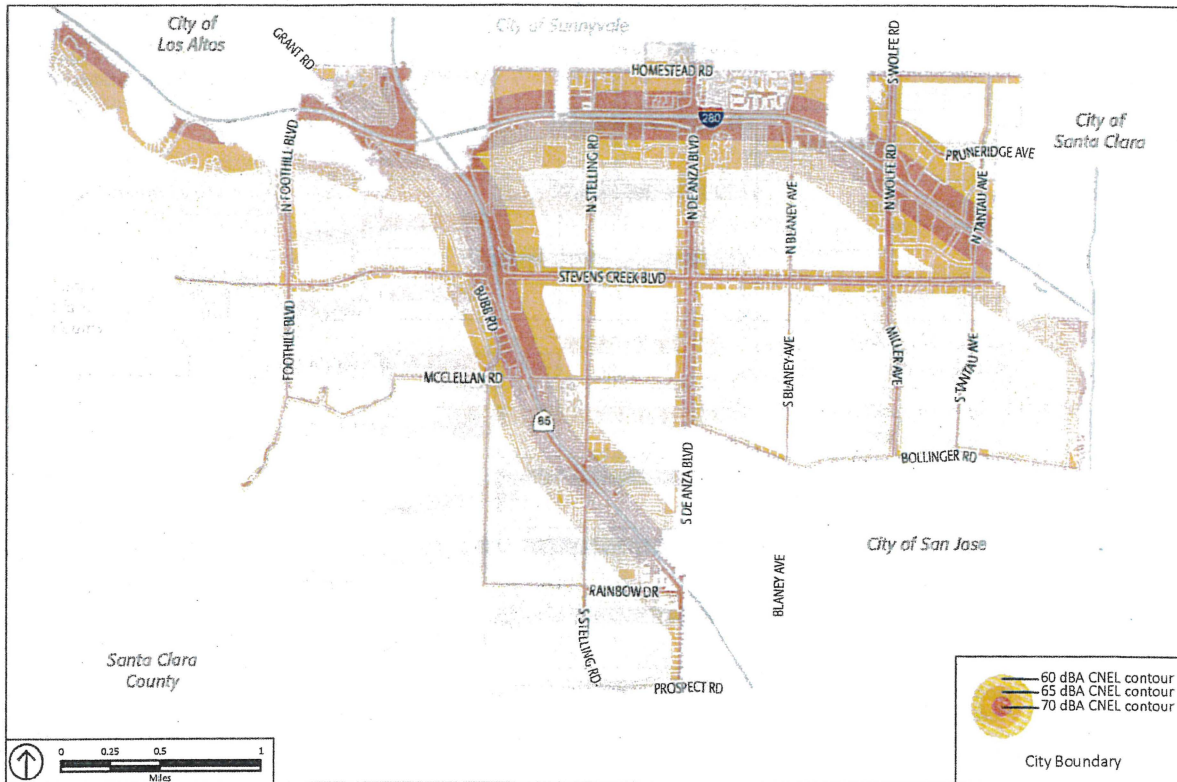
FUTURE NOISE CONTOURS FOR CUMULATIVE PLUS PROJECT/PROJECT ALTERNATIVE SCENARIOS

FIGURE 3.13-2

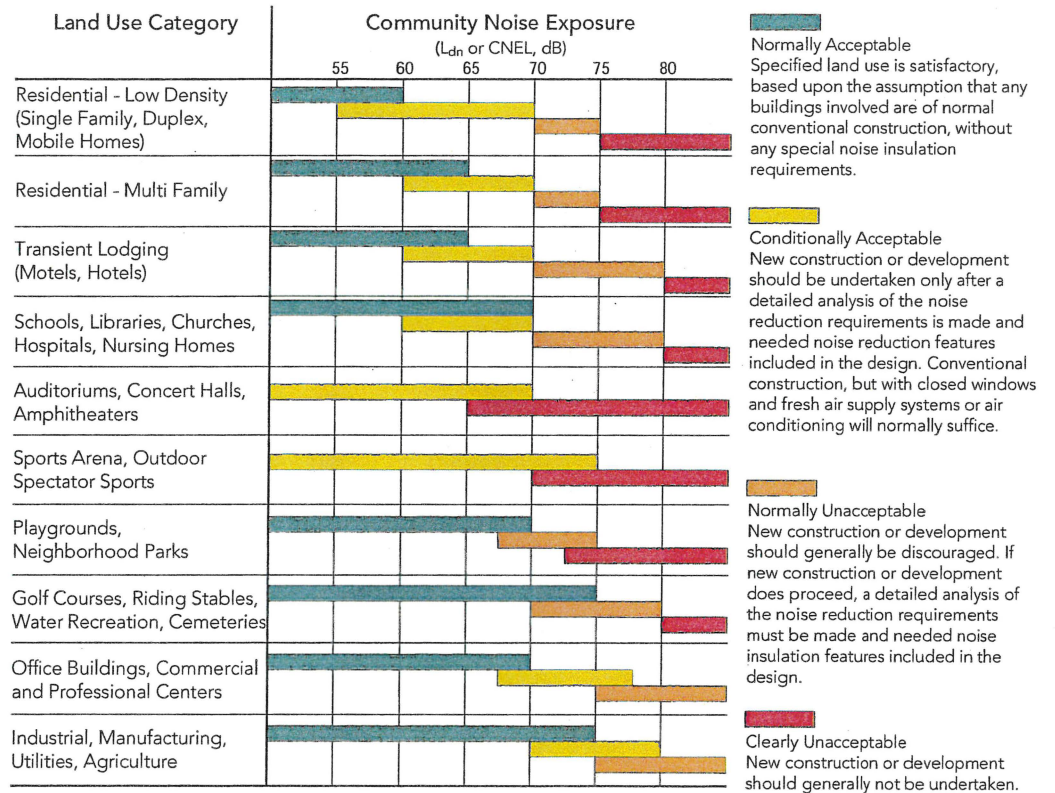
# COMMUNITY VISION 2040

City of Cupertino

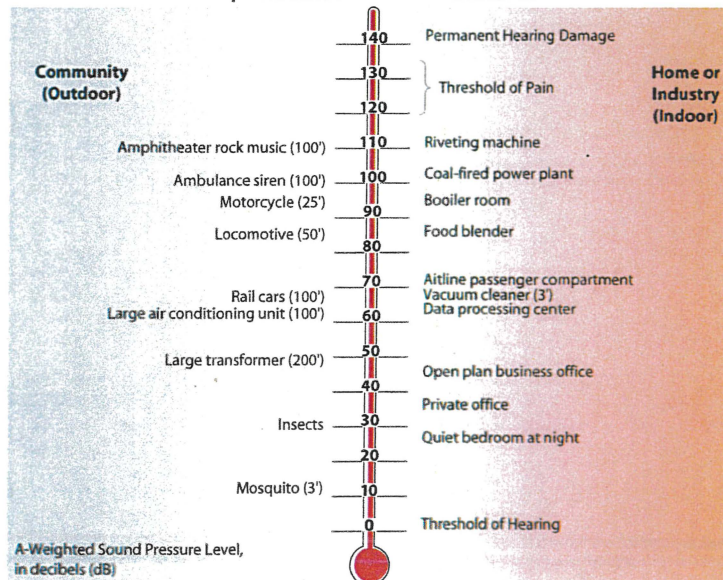
Figure D-2  
Future Noise Contours



**FIGURE HS-8  
LAND USE COMPATIBILITY FOR  
COMMUNITY NOISE ENVIRONMENTS**



**Representative Sounds and Sound Levels**





**Mitigation Measure:**

**MM AQ-7.1:** Future development under the proposed project (and General Plan Buildout with Maximum Residential Alternative and Retail and Residential Alternative) shall implement mitigation measure MM AQ-2.1 to reduce on-site diesel exhaust emissions, which would thereby reduce the maximum cancer risk due to construction of the project (and General Plan Buildout with Maximum Residential Alternative and Retail and Residential Alternative).

With the implementation of the above mitigation measure, the maximum cancer risk from the project construction (and General Plan Buildout with Maximum Residential Alternative, and Retail and Residential Alternative) would be 4.4 in one million or less, which is below the BAAQMD threshold of greater than 10 per one million for cancer risk. **(Less than Significant with Mitigation Incorporated)**

**General Plan Buildout with Maximum Residential Alternative**

The construction of the General Plan Buildout with Maximum Residential Alternative would result in the similar health risk exposure to sensitive receptors as described above for the proposed project. See Impact AQ-7 and mitigation measure MM AQ-7.1. **(Less than Significant with Mitigation Incorporated)**

**Retail and Residential Alternative**

The construction of the Retail and Residential Alternative would result in the similar health risk exposure to sensitive receptors as described above for the proposed project. See Impact AQ-7 and mitigation measure MM AQ-7.1. **(Less than Significant with Mitigation Incorporated)**

**Occupied/Re-Tenanted Mall Alternative**

The Occupied/Re-Tenanted Mall Alternative would result in construction emissions related to exterior and interior tenant improvements. It is anticipated that the construction emissions under this alternative would be much lower than those involved with demolition, grading, and new exterior building construction, which would occur under the proposed project, General Plan Buildout with Maximum Residential Alternative, and Retail and Residential Alternative. In addition, interior work typically involves minimal diesel equipment and would be completed indoors. For these reasons, it is anticipated the construction-related health risk from this alternative would be less than significant. **(Less than Significant Impact: Not a CEQA Impact)**

**Exposure of On-Site Sensitive Receptors to Toxic Air Contaminants – Planning Consideration**

**Project**

As previously discussed in Section 3.0, in 2015 the California Supreme Court ruled that CEQA does not generally require an analysis of the impacts of locating development in areas subject to environmental hazards unless the project would exacerbate those existing environmental hazards or

the hazards at issue are subject to certain specified exceptions to this general rule.<sup>21</sup> The City of Cupertino has policies, however, that address existing air quality conditions affecting a proposed project. Determining whether new on-site receptors would be affected are the same as those listed for Project Health Risk and Cumulative Health Risk in Table 3.3-2, above.

The proposed project (and General Plan Buildout with Maximum Residential Alternative, and Retail and Residential Alternative) would include the development of new sensitive receptors, such as new residents, in locations near existing roadways and highways. Future on-site sensitive receptors, therefore, would be exposed to levels of TACs and/or PM<sub>2.5</sub> from adjacent roadways and highways that could cause an unacceptable cancer risk or hazard. Existing stationary sources are also a source of TACs, however, a search of the BAAQMD screening tool did not reveal any stationary sources that would have an impact on the project site.

Increased cancer risks and exposure to PM<sub>2.5</sub> were calculated consistent with BAAQMD and CARB recommended risk assessment methods. In general, cancer risks will decrease with distance from the roadway and with height of the receptors (i.e., residents on upper floors). The impact of these roadways on the proposed project are discussed further below. Refer to Appendix B for modeling details, data inputs, and assumptions.

- Interstate 280 – The predicted maximum increased cancer risk at the project site from traffic on I-280 was calculated to be 4.0 in one million, which is below than the BAAQMD threshold of significance of 10 in one million. Impacts from PM<sub>2.5</sub> emissions from I-280 would occur at the project site along portions of the site closest to the freeway. BAAQMD adopted a significance threshold of an annual average PM<sub>2.5</sub> concentration greater than 0.3 µg/m<sup>3</sup>. Appendix B shows contour lines on the site where PM<sub>2.5</sub> concentrations would occur at or above the BAAQMD threshold of significance of 0.3 µg/m<sup>3</sup>. For distances within about 530 feet from I-280 on the project site west of North Wolfe Road and within about 620 feet from I-280 on the project site east of North Wolfe Road, PM<sub>2.5</sub> concentrations would be significant. The Hazard Index (HI) is estimated to be 0.0006, which is below the BAAQMD threshold of significance of 1.0.
- Stevens Creek Boulevard – The predicted maximum increased cancer risk at the project site from traffic on Stevens Creek Boulevard was calculated to be 2.2 in one million, which is below the BAAQMD threshold of significance of 10 in one million. Figure 3.3-2 shows the contour lines on the project site where PM<sub>2.5</sub> concentrations would occur at or above the BAAQMD threshold of significance of 0.3 µg/m<sup>3</sup>. For distances within about 130 feet from Stevens Creek Boulevard at the project site, PM<sub>2.5</sub> concentrations would be significant. The HI is estimated to be 0.0004, which is below the BAAQMD threshold of significance of 1.0.
- North Wolfe Road – The predicted maximum increased cancer risk at the project site from traffic on North Wolfe Road was calculated to be 3.3 in one million, which is below the BAAQMD threshold of significance of 10 in one million. Figure 3.3-3 shows the contour lines on the project site where PM<sub>2.5</sub> concentrations would occur at or above the BAAQMD threshold of significance of 0.3 µg/m<sup>3</sup>. For distances within about 95 feet from North Wolfe Road and within about 215 feet east of North Wolfe Road, PM<sub>2.5</sub> concentrations would be

<sup>21</sup> *California Building Industry Association v. BAAQMD*, 62 Cal. 4th 369, filed December 17, 2015.

significant. The HI is estimated to be 0.0006, which is below the BAAQMD threshold of significance of 1.0.

- Vallco Parkway – The predicted maximum increased cancer risk at the project site from traffic on North Wolfe Road was calculated to be 8.6 in one million, which is below the BAAQMD threshold of significance of 10 in one million. The PM<sub>2.5</sub> concentrations and HI on-site from traffic on Vallco Parkway are estimated to be 0.25 µg/m<sup>3</sup> and 0.03, which are below their respective BAAQMD thresholds of significance of 0.3 µg/m<sup>3</sup> and 1.0.

Figure 3.3-4 shows the combined annual PM<sub>2.5</sub> concentrations across the project site for all three roadways (I-280, Stevens Creek Boulevard, and North Wolfe Road). Areas with potentially significant annual PM<sub>2.5</sub> concentrations are highlighted. Excess cancer risk from these combined sources were found to be below the BAAQMD 100 in one million combined source significance threshold. Non-cancer health effects from these combined sources would not exceed the significance threshold of a HI of greater than 10.0. Refer to Appendix B for modeling details, data inputs, and assumptions.

The proposed project (and General Plan Buildout with Maximum Residential Alternative, and Retail and Residential Alternative) could also allow development of new non-residential land uses that are potential emissions sources. The proposed project (and General Plan Buildout with Maximum Residential Alternative, and Retail and Residential Alternative) could include stationary sources of pollutants that would be required to obtain permits to operate in compliance with BAAQMD rules. These sources include, but are not limited to, dry cleaners and back up diesel generators. The permit process ensures that these sources would be equipped with the required emission controls and that, individually, these sources would result in a less than significant community risk impact.

The project would include a transit hub. It is estimated that 15 buses would service the transit hub daily. Assuming the buses would be diesel powered, this relatively small number of daily buses accessing the transit hub would not be expected to pose a significant community risk impact to future residents on-site.

The proposed project (and General Plan Buildout with Maximum Residential Alternative and Retail and Residential Alternative) would allow new residential land uses on-site that would be exposed to TAC and PM<sub>2.5</sub> concentrations above the BAAQMD threshold of significance.

Consistent with City of Cupertino General Plan policies, the Specific Plan includes design policies that require the following to reduce TAC and PM<sub>2.5</sub> exposure where sensitive receptors are located within the setback distances identified above and shown in Figure 3.3-1, Figure 3.3-2, and Figure 3.3-3:

- Future development under the proposed project (and General Plan Buildout with Maximum Residential Alternative and Retail and Residential Alternative) that includes sensitive receptors (such as residences or daycare centers) located within the above discussed setback distances from I-280 and local roadways shall require site-specific analysis to quantify the level of TAC and PM<sub>2.5</sub> exposure. This analysis shall be conducted following procedures outlined by BAAQMD. If the site-specific analysis reveals significant exposures, such as cancer risk greater than 10 in one million acute or chronic hazards with a HI greater than 1.0,

or annual PM<sub>2.5</sub> exposures greater than 0.3 µg/m<sup>3</sup>, or a significant cumulative health risk in terms of excess cancer risk greater than 100 in one million, acute or chronic hazards with a HI greater than 10.0, or annual PM<sub>2.5</sub> exposures greater than 0.8 µg/m<sup>3</sup>, additional measures such as those detailed below shall be implemented to reduce the risk to below the threshold. If this is not possible, the sensitive receptors shall be relocated.

- For significant cancer risk exposure, as defined by BAAQMD, indoor air filtration systems shall be installed to effectively reduce particulate levels to below the significance threshold. Project sponsors shall submit performance specifications and design details to demonstrate that lifetime residential exposures would result in less than significant cancer risks (less than 10 in one million chances or 100 in one million for cumulative sources), HI, and PM<sub>2.5</sub> concentration. To reduce significant community health risk exposure, future development shall implement the following measures:
  - Air filtration systems installed at significantly impacted sensitive receptor buildings shall be rated MERV-13 or higher and a maintenance plan for the air filtration system shall be implemented.
  - Trees and/or vegetation shall be planted between sensitive receptors and pollution sources, if feasible. Trees that are best suited to trapping particulate matter shall be planted, including the following: pine (*Pinus nigra var. maritime*), cypress (*X Cupressocyparis leylandii*), hybrid poplar (*Populus deltoids X trichocarpa*), and redwoods (*Sequoia sempervirens*).
  - Sites shall be designed to locate sensitive receptors as far as possible from any freeways, roadways, diesel generators, and distribution centers.
  - Operable windows, balconies, and building air intakes shall be located as far away from TAC sources as feasible. If future residences are located near a distribution center, residences shall not be located immediately adjacent to a loading dock or where trucks concentrate to deliver goods.
- Future development under the proposed project (and General Plan Buildout with Maximum Residential Alternative and Retail and Residential Alternative) that would include TAC sources (such as diesel backup generators) would be evaluated through the CEQA environmental review process or BAAQMD permit process to ensure they do not cause a significant health risk in terms of excess cancer risk greater than 10 in one million, acute or chronic hazards with a HI greater than 1.0, or annual PM<sub>2.5</sub> exposures greater than 0.3 µg/m<sup>3</sup>, or a significant cumulative health risk in terms of excess cancer risk greater than 100 in one million, acute or chronic hazards with a HI greater than 10.0, or annual PM<sub>2.5</sub> exposures greater than 0.8 µg/m<sup>3</sup>.

<b>Table 3.13-5: Cumulative Plus Project Setback Distances to Meet the 70 dBA CNEL Threshold of Common Outdoor Use Areas at Commercial Land Uses</b>	
<b>Roadway</b>	<b>Distance from Centerline to 70 dBA CNEL (feet)</b>
I-280	580
Perimeter Road, north of Stevens Creek Boulevard	30
Perimeter Road, near Amherst Drive	<15
Perimeter Road, west of North Wolfe Road	55
Perimeter Road, east of North Wolfe Road	200
Perimeter Road, north of Vallco Parkway	35
Stevens Creek Boulevard	85
Vallco Parkway	60
North Wolfe Road, north of Stevens Creek Boulevard	115
North Wolfe Road, at Vallco Parkway	115
North Wolfe Road, south of Perimeter Road	125
North Wolfe Road, north of Perimeter Road	150

*Future Interior Noise Environment*

The state of California requires that interior noise levels be maintained at 45 dBA CNEL or less at multi-family residences and lodging facilities where occupants sleep, and the CALGreen Code requires that interior noise levels in offices and commercial buildings be maintained at or below at 50 dBA  $L_{eq}(1-hr)$  or less during hours of operation.

The state of California requires that interior noise levels for residential land uses be at or below 45 dBA CNEL. For commercial land uses, the 2016 Cal Green Code would apply, which requires interior noise levels be maintained at 50 dBA  $L_{eq}(1-hr)$  or less during hours of operation, which are assumed to be daytime hours of 7:00 AM to 10:00 PM for the proposed commercial uses.

- Proposed Multi-Family Residential Land Uses* – Standard residential construction provides approximately 15 dBA of exterior-to-interior noise reduction, assuming the windows are partially open for ventilation. With the windows closed, standard construction provides approximately 20 to 25 dBA of noise reduction in interior spaces. Where exterior noise levels range from 60 to 65 dBA CNEL, the inclusion of adequate forced-air mechanical ventilation is often the method selected to reduce interior noise levels to acceptable levels by allowing the resident to close the windows to control noise. Where noise levels exceed 65 dBA CNEL, forced-air mechanical ventilation systems and sound-rated construction methods are normally required. Such methods or materials may include a combination of smaller window and door sizes as a percentage of the total building façade facing the noise source, sound-rated windows and doors, sound-rated exterior wall assemblies, and mechanical ventilation so windows may be kept closed at the occupant’s discretion.

For residential buildings proposed under the project, General Plan Buildout with Maximum Residential Alternative and Retail and Residential Alternative set back from the nearby roadway centerline at the distances shown in Table 3.13-4, the exterior-facing units would be exposed to future exterior noise levels of 65 dBA CNEL and the future interior noise levels at these units would be 50 dBA CNEL, which would exceed 45 dBA CNEL. Proposed residential buildings set back from the nearby roadway centerline equivalent to the distances shown in Table 3.13-4 that are built with standard construction materials would not meet the City's interior noise level threshold and would require noise insulation features to be compatible with the noise environment at the site (see standard permit conditions identified below).

- *Proposed Commercial/Office Land Uses* – Hourly average noise levels during business hours within proposed (or reoccupied) commercial land uses would need to meet the 50 dBA  $L_{eq(1-hr)}$  threshold established by the 2016 Cal Green Code. Standard commercial construction materials would provide at least 20 to 25 dBA of noise reduction in interior spaces. The inclusion of adequate forced-air mechanical ventilation systems is normally required so windows may be kept closed at the occupants' discretion.

Assuming a minimum of 20 dBA of exterior-to-interior noise reduction, the future interior noise levels would be 50 dBA  $L_{eq(1-hr)}$  or less at the setback distances shown in Table 3.13-5. Commercial/office buildings proposed nearer to roadways than the minimum distances shown in Table 3.13-5 would potentially be exposed to interior noise levels above 50 dBA  $L_{eq(1-hr)}$  and would require noise insulation features to be compatible with the noise environment at the site (see standard permit conditions identified below).

**Standard Permit Conditions:** Future development under the proposed project, General Plan Buildout with Maximum Residential Alternative, or Retail and Residential Alternative shall implement the following standard permit conditions to comply with required exterior and interior noise levels standards:

- An acoustical study shall be completed during the application process when project-specific information, such as building elevations, layouts, floor plans, and position of buildings on the site, is known. The study shall determine compliance with the noise and land use compatibility standards, identify potential noise impacts, and propose site-specific measures to reduce exposure to exterior and interior noise levels that exceed maximum permissible levels.
- To reduce exterior noise levels to meet the normally acceptable thresholds of 65 dBA CNEL at multi-family residences or 70 dBA CNEL at commercial uses, locate noise-sensitive outdoor use areas away from major roadways or other significant sources of noise when developing site plans. Shield noise-sensitive spaces with buildings or noise barriers to reduce exterior noise levels. The final detailed design of the heights and limits of proposed noise barriers shall be completed at the time that the final site and grading plans are submitted.
- The following shall be implemented to reduce interior noise levels to meet the normally acceptable thresholds of 45 dBA CNEL at multi-family residences or 50 dBA  $L_{eq(1-hr)}$  at commercial uses during hours of operations:

- If future exterior noise levels at residential building facades are between 60 and 65 dBA CNEL, incorporate adequate forced-air mechanical ventilation to reduce interior noise levels to acceptable levels by closing the windows to control noise.
- If future exterior noise levels at residential building facades exceed 65 dBA CNEL, forced-air mechanical ventilation systems and sound-rated construction methods are normally required. Such methods or materials may include a combination of smaller window and door sizes as a percentage of the total building façade facing the noise source, sound-rated windows and doors, sound-rated exterior wall assemblies, and mechanical ventilation so windows may be kept closed at the occupant's discretion.
- If the 50 dBA  $L_{eq(1-hr)}$  threshold would not be met, other site-specific measures, such as increasing setbacks of the buildings from the adjacent roadways, using shielding by other buildings or noise barriers to reduce noise levels, implementing additional sound treatments to the building design, etc. shall be considered to reduce interior noise levels to meet the Cal Green Code threshold.

The project and project alternatives would result in the same or similar future exterior and interior noise environment as described above. Inclusion of the above-described standard permit conditions would ensure future residential and commercial uses of the proposed project (or General Plan Buildout with Maximum Residential Alternative or Retail and Residential Alternative) conform to applicable exterior and interior noise standards. The Occupied/Re-Tenanted Mall Alternative is a permitted land use, and can be implemented without further discretionary approvals from the City or environmental review under CEQA. No mitigation measures or additional conditions of approval can be required.

## Construction Noise

### Project

It is assumed that the proposed project (and General Plan Buildout with Maximum Residential Alternative and Retail and Residential Alternative) would limit construction activity to daytime hours, Monday through Friday, consistent with Section 10.48.053 of the Municipal Code.

Construction activities generate considerable amounts of noise, especially during demolition, earth-moving, and infrastructure construction phases when heavy equipment is used. The highest maximum noise levels generated by construction of the project (or General Plan Buildout with Maximum Residential Alternative or Retail and Residential Alternative) would typically range from about 80 to 90 dBA  $L_{max}$  at a distance of 50 feet from the noise source. Typical hourly average construction-generated noise levels for residential mixed-use buildings are about 81 to 88 dBA  $L_{eq}$  measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, impact tools, etc.). Hourly average construction noise levels for hotels and office buildings typically range from 78 to 89 dBA  $L_{eq}$ .<sup>86</sup> Construction-generated noise levels drop off at a rate of about six dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain can provide an additional five to 10 dBA noise reduction at distant receptors.

<sup>86</sup> Typical hourly average construction-generating noise levels include noise generated from removal of trees.

A detailed list of equipment expected for project (and General Plan Buildout with Maximum Residential Alternative and Retail and Residential Alternative) construction and construction phasing information were not available at the time of the noise study. Appendix F provides detailed information regarding the maximum noise levels generated by various pieces of construction equipment, as well as typical noise levels ranges for construction phases of a variety of development types. Several individual pieces of equipment would potentially produce noise levels that would exceed the City's 87 dBA  $L_{max}$  limit at 25 feet; the noisiest of which would be impact pile driving. Impact pile driving would result in maximum noise levels up to 105 dBA  $L_{max}$  at 50 feet, which would equate to 111 dBA  $L_{max}$  at 25 feet. This would be a potentially significant impact.

Without knowing the location on the site for each proposed land use, distances to the shared property lines of the adjacent residential land uses cannot be determined, and exact construction noise levels cannot be estimated. Based upon typical construction noise levels for various land uses, minimum distances from the residential property lines to the center of the construction sites for each proposed land use type were calculated to meet the 80 dBA  $L_{eq}$  threshold at the nearby residence property line. Table 3.13-6 summarizes the minimum distances required to meet the City's threshold.

	Type of Proposed Land Use			
	Residential	Hotel	Office/ Commercial	Parking Structure
Minimum Distance Required to Meet 80 dBA $L_{eq}$	126 feet	141 feet	141 feet	141 feet

It is conservatively assumed that construction activities on the project site would exceed the 80 dBA  $L_{eq}$  threshold at the property lines of the nearby existing residences (refer to discussion above). The distances shown in Table 3.13-6 do not take into account pile driving activities, which would further increase noise levels.

**Mitigation Measure:**

**MM NOI-1.1:** Construction activities under the proposed project (or General Plan Buildout with Maximum Residential Alternative or Retail and Residential Alternative) shall be conducted in accordance with provisions of the City's Municipal Code which limit temporary construction work to daytime hours,<sup>87</sup> Monday through Friday. Construction is prohibited on weekends and all holidays. Further, the City requires that all equipment have high-quality noise mufflers and abatement devices installed and are in good condition. Additionally, the construction crew shall adhere to the following construction best management practices listed in MM NOI-1.2 below to reduce construction noise levels emanating from the site

<sup>87</sup> Per Municipal Code Section 10.48.010, daytime is defined as the period from 7:00 AM to 8:00 PM weekdays.



and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity.

**MM NOI-1.2:** Future development shall implement a construction noise control plan, including, but not limited to, the following available controls:

- Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment. Temporary noise barrier fences would provide a five dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receptor and if the barrier is constructed in a manner that eliminates any cracks or gaps.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines shall be strictly prohibited.
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.
- Utilize “quiet” air compressors and other stationary noise sources where technology exists.
- Construction staging areas shall be established at locations that would create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
- Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors.
- Control noise from construction workers’ radios to a point where they are not audible at existing residences bordering the project site.
- If impact pile driving is proposed, temporary noise control blanket barriers shall shroud pile drivers or be erected in a manner to shield the adjacent land uses.
- If impact pile driving is proposed, foundation pile holes shall be pre-drilled to minimize the number of impacts required to seat the pile. Pre-drilling foundation pile holes is a standard construction noise control technique. Pre-drilling reduces the number of blows required to seat the pile. Notify all adjacent land uses of the construction schedule in writing.
- The contractor shall prepare a detailed construction schedule for major noise-generating construction activities and provide it to adjacent land uses. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.