

**ILLINGWORTH & RODKIN, INC.**  
 Acoustics • Air Quality

1 Willowbrook Court, Suite 120  
 Petaluma, California 94954

Tel: 707-794-0400  
 www.illingworthrodkin.com

Fax: 707-794-0405  
 illro@illingworthrodkin.com

June 28, 2018

Ms. Kristy Weis  
 David J. Powers & Associates  
 1871 The Alameda, Suite 200  
 San José, California 95126

**Subject: Vallco Special Area Specific Plan Project, Cupertino, CA  
 Addendum Letter to the Environmental Noise Assessment**

Dear Ms. Weis:

In addition to the proposed project and the three previously studied project alternatives, a new Housing Rich Alternative has been proposed as part of the Vallco Special Area Specific Plan Project in Cupertino, California. This addendum letter focuses on the impacts of this new alternative and how it compares to the impacts discussed in the May 2018 Noise and Vibration Assessment. Details pertaining to the Housing Rich Alternative are included in Table 1. Additionally, a supplemental traffic study completed for the Housing Rich Alternative.

**TABLE 1 Summary of Project and Project Alternative Development**

	Land uses					
	Commercial (square footage)	Office (square footage)	Hotel (units)	Residential (units)	Green Roof (acres)	Civic Space (square footage)
Housing Rich Alternative	600,000 (includes 60,000 sf as performing arts center)	1,500,000 (includes 40,000 sf school administration building and 10,000 sf STEM Lab)	339	3,250	30	65,000 (includes 50,000 sf City Hall and 15,000 sf Adult Education Space)

## **GENERAL PLAN CONSISTENCY ANALYSIS**

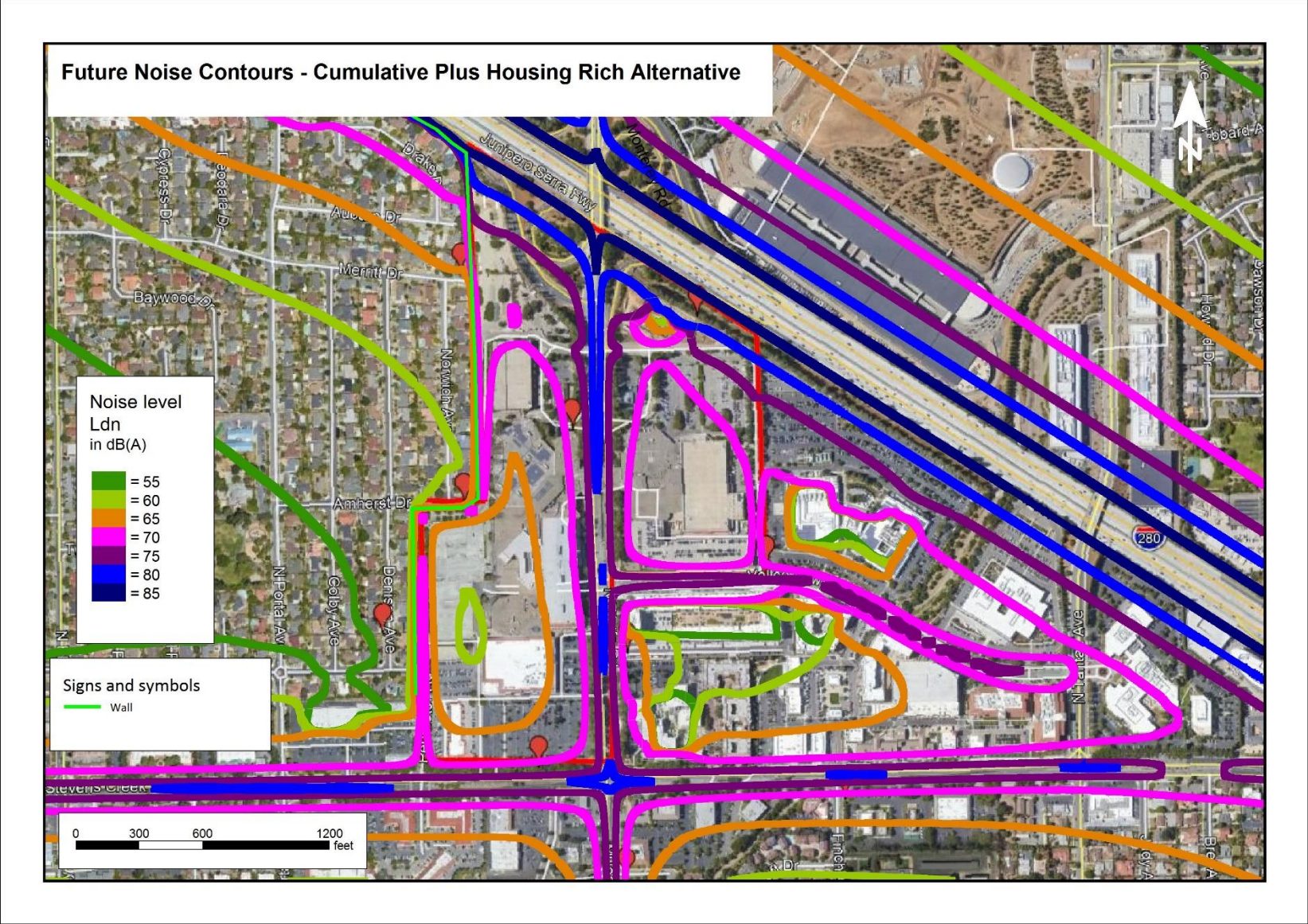
### *Future Exterior Noise Environment*

The traffic volumes for the Housing Rich Alternative were inputted into the SoundPLAN Version V8.0 model developed for the proposed project, and Table 2 presents the community noise equivalent levels for each cumulative plus project design scenario and the cumulative (no project) scenario, calculated at a reference distance of 75 feet from the center of the near travel lane for the major roadways surrounding the site. As indicated in Table 2, there is a 1 to 2 dBA CNEL difference between the cumulative and cumulative plus project scenarios under any proposed alternative. Figure 1 shows the cumulative plus project noise level contours for the Housing Rich Alternative, which would be within 1 dBA of the proposed project and other project alternatives, as discussed in the May 2018 assessment.

**TABLE 2 Cumulative No Project and Cumulative Plus Project Modeled Noise Levels Along Surrounding Roadways**

Roadway	Future Noise Level 75 feet from the Centerline of the Roadway, dBA CNEL					
	Cumulative No Project	Occupied/ Re-Tenanted Mall	Proposed Specific Plan	General Plan Buildout with Max. Residential	Retail & Residential	Housing Rich
I-280	85	85	85	85	85	85
Perimeter Road, north of Stevens Creek Boulevard	65	66	67	66	66	67
Perimeter Road, near Amherst Drive	62	62	63	63	62	63
Perimeter Road, west of North Wolfe Road	68	69	69	69	69	69
Perimeter Road, east of North Wolfe Road	76	76	76	76	76	76
Perimeter Road, north of Vallco Parkway	66	67	67	67	67	67
Stevens Creek Boulevard	71	71	71	71	71	71
Vallco Parkway	68	69	70	70	69	70
North Wolfe Road, north of Stevens Creek Boulevard	71	71	71	71	71	71
North Wolfe Road, at Vallco Parkway	71	71	72	72	71	72
North Wolfe Road, south of Perimeter Road	72	73	73	73	73	73
North Wolfe Road, north of Perimeter Road	74	75	75	75	75	75

**FIGURE 1 Future Noise Contours for Cumulative Plus Housing Rich Alternative Traffic Scenario**



Proposed Multi-Family Residential Land Uses

The noise levels from Table 2 for the alternative representing the worst-case scenario, which was the Housing Rich Alternative scenario as it generates more daily trips than the proposed project and other project alternatives evaluated in the May 2018 assessment, were used to estimate the distances at which common outdoor use areas with direct line-of-sight to the roadways would need to be set back from area roadways to meet the 65 dBA CNEL threshold for multi-family residential land uses. Table 3 summarizes the setbacks required to meet 65 dBA CNEL without additional noise control such as barriers. The distances calculated in Table 3 are within 20 feet of the distances described in the EIR.

**TABLE 3 Cumulative Plus Housing Rich Alternative Setback Distances to Meet the 65 dBA CNEL Threshold of Common Outdoor Use Areas at Residential Land Uses**

<b>Roadway</b>	<b>Distance from Centerline to 65 dBA CNEL</b>
I-280	1,035 feet
Perimeter Road, north of Stevens Creek Boulevard	105 feet
Perimeter Road, near Amherst Drive	45 feet
Perimeter Road, west of North Wolfe Road	175 feet
Perimeter Road, east of North Wolfe Road	355 feet
Perimeter Road, north of Vallco Parkway	115 feet
Stevens Creek Boulevard	195 feet
Vallco Parkway	165 feet
North Wolfe Road, north of Stevens Creek Boulevard	200 feet
North Wolfe Road, at Vallco Parkway	215 feet
North Wolfe Road, south of Perimeter Road	260 feet
North Wolfe Road, north of Perimeter Road	310 feet

Proposed Commercial/Office Land Uses

The noise levels summarized in Table 2 (i.e., the Housing Rich Alternative) were also used to estimate the distances at which common outdoor use areas with direct line-of-sight to the roadways would need to be set back from area roadways to meet the 70 dBA CNEL threshold for commercial/office land uses. The results for the Housing Rich Alternative are summarized in Table 4. The distances calculated in Table 4 are within 20 feet of the distances described in the May 2018 assessment for the proposed project and other project alternatives.

The results for the future exterior noise environment for both residential and commercial uses would be the consistent with the results in the May 2018 assessment.

**TABLE 4 Cumulative Plus Housing Rich Alternative Setback Distances to Meet the 70 dBA CNEL Threshold of Common Outdoor Use Areas at Commercial Land Uses**

<b>Roadway</b>	<b>Distance from Centerline to 70 dBA CNEL</b>
I-280	580 feet
Perimeter Road, north of Stevens Creek Boulevard	35 feet
Perimeter Road, near Amherst Drive	<15 feet
Perimeter Road, west of North Wolfe Road	55 feet
Perimeter Road, east of North Wolfe Road	200 feet
Perimeter Road, north of Vallco Parkway	40 feet
Stevens Creek Boulevard	90 feet
Vallco Parkway	65 feet
North Wolfe Road, north of Stevens Creek Boulevard	100 feet
North Wolfe Road, at Vallco Parkway	115 feet
North Wolfe Road, south of Perimeter Road	130 feet
North Wolfe Road, north of Perimeter Road	170 feet

*Future Interior Noise Environment*

Proposed Multi-Family Residential Land Uses

For residential building setbacks from the centerline of the nearby roadway equivalent to those distances shown in Table 3, 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 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.

Proposed Commercial Land Uses

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 4. Commercial buildings proposed nearer to area roadways than the minimum screening distances shown in Table 4 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.

*Recommendations to Reduce Future Exterior and Interior Noise Levels*

The same recommendations discussed in the May 2018 assessment would be consistent for the proposed project, the Housing Rich Alternative, and each of the other proposed alternatives.



## NOISE IMPACTS AND MITIGATION MEASURES

The results in the May 2018 assessment for **Impacts 1 (Noise Levels in Excess of Standards), 2 (Exposure to Excessive Groundborne Vibration due to Construction), and 5 (Temporary Construction Noise)** would be consistent for the Housing Rich Alternative. **Mitigation Measures 1 and 2** in the May 2018 assessment would be recommended for the proposed project, the Housing Rich Alternative, and each of the other proposed alternatives.

A total of 67 intersections were included in the supplemental traffic study completed in June 2018. With the exception of Perimeter Road, receptors along Vallco Parkway and all other roadway segments in the project vicinity would experience noise level increases of 2 dBA CNEL or less under the project and project alternatives, including the Housing Rich Alternative. Perimeter Road receptors north of Stevens Creek Boulevard and north of Vallco Parkway would experience a 6 to 8 dBA increase in noise levels above existing conditions under the project and project alternative traffic scenarios. However, only the receptors located north of Stevens Creek Boulevard would be considered noise-sensitive. Therefore, the results for **Impact 3 (Permanent Noise Level Increase)** in the May 2018 assessment would be consistent with the results of the Housing Rich Alternative, and **Mitigation Measure 3** in the May 2018 assessment would be recommended for the proposed project, the Housing Rich Alternative, and each of the other proposed alternatives.

For **Impact 4 (Cumulative Noise Increase)**, traffic noise levels along Vallco Parkway, between Perimeter Road and North Wolfe Road, are projected to increase by 3 dBA CNEL under cumulative plus project (and each alternative) conditions, while cumulative (no project) conditions resulted in an increase of 2 dBA CNEL. Additionally, along Vallco Parkway, east of Perimeter Road, a 3 dBA CNEL increase would occur under the cumulative plus project scenario and under the Housing Rich Alternative only, while the other proposed alternatives and the cumulative (no project) scenarios would result in a 2 dBA CNEL increase. Since each scenario involving project and alternative conditions would be substantially increased between Perimeter Road and North Wolfe Road and east of Perimeter Road under the proposed project and the Housing Rich Alternative scenarios, and the project's contribution would be 1 dBA CNEL, the project would cause a significant cumulative traffic noise impact.

Additionally, along Perimeter Road north of Stevens Creek Boulevard and north of Vallco Parkway, an increase of 6 to 8 dBA was calculated under the cumulative plus project scenario and each alternative, while the cumulative (no project) scenario resulted in an increase of 1 dBA CNEL or less. However, as in **Impact 3**, only the segment along Perimeter Road north of Stevens Creek Boulevard would impact existing noise-sensitive receptors. As determined in the May 2018 assessment, a cumulatively considerable contribution to the overall traffic noise increase at the adjacent existing residential land uses would occur under the proposed project and each alternative, including the Housing Rich Alternative. **Impact 4** is a significant impact, and **Mitigation Measure 4** from the May 2018 assessment would also be recommended to reduce the Cumulative plus Housing Rich Alternative Noise Increase impact.

**TABLE 5 Calculated Cumulative Noise Level Increases Above Existing Conditions**

<b>Roadway Segment</b>	<b>Cumulative (No Project) Noise Increase</b>	<b>Cumulative Plus Project (and General Plan Buildout with Maximum Residential Alternative and Retail and Residential Alternative) Noise Increase</b>	<b>Cumulative Plus Housing Rich Alternative Noise Increase</b>
Perimeter Road, north of Stevens Creek Boulevard	< 1 dBA	7 to 8 dBA	8 dBA
Perimeter Road, north of Vallco Parkway	1 dBA	6 dBA	7 dBA
North Wolfe Road, north of Vallco Parkway	1 dBA	2 to 3 dBA	3 dBA
North Wolfe Road, between Vallco Parkway and Stevens Creek Boulevard	1 dBA	2 dBA	2 dBA
Miller Avenue, south of Stevens Creek Boulevard	1 dBA	1 dBA	1 dBA
Stevens Creek Boulevard, east of North Wolfe Road	1 dBA	1 to 2 dBA	2 dBA
Stevens Creek Boulevard, between North Wolfe Road and Perimeter Road	1 dBA	1 dBA	1 dBA
Stevens Creek Boulevard, west of Perimeter Road	1 dBA	2 dBA	2 dBA
Vallco Parkway, east of Perimeter Road	2 dBA	2 to 3 dBA	3 dBA
Vallco Parkway, Perimeter Road to North Wolfe Road	2 dBA	3 dBA	3 dBA

The calculated increases shown in the table are for the roadway segments in the immediate vicinity of the project site. All other intersections included in the traffic study resulted in the same noise level increases for all cumulative conditions (no project, plus project, and each project alternative).

The Housing Rich Alternative and the traffic volumes for the four additional intersections did not change the results of the impact analysis in the Vallco Special Area Specific Plan Project EIR.



Sincerely,

A handwritten signature in blue ink, appearing to read "Carrie Janello". The signature is fluid and cursive, with the first name "Carrie" written in a larger, more prominent script than the last name "Janello".

Carrie J. Janello  
Senior Consultant  
*Illingworth & Rodkin, Inc.*