ADAMS BROADWELL JOSEPH & CARDOZO
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
601 GATEWAY BOULEVARD, SUITE 1000
SOUTH SAN FRANCISCO, CA 94080-7037
TEL: (650) 589-1660
FAX: (650) 589-5062
amcguire@adamsbroadwell.com

SACRAMENTO OFFICE
520 CAPITOL MALL, SUITE 350
SACRAMENTO, CA 95814-4721
TEL: (916) 444-6201
FAX: (916) 444-6209

KEVIN T. CARMICHAEL
CHRISTINA M. CARO
THOMAS A. ENSLOW
KELILAH D. FEDERMAN
RICHARD M. FRANCO
ANDREW J. GRAF
TANYA A. GULESSERIAN
DARION N. JOHNSTON
RACHAEL E. KOSS
AIDAN P. MARSHALL
ALAURA R. McGUIRE
ISABEL TAHIR

Of Counsel
DANIEL L. CARDOZO
MARC D. JOSEPH

July 15, 2025

Via Email and Overnight Mail
City of Antioch Planning Commission
Kevin Riley, Chair
Seth Webber, Vice-Chair
Commissioners Jennifer Perez,
Robert Martin, Ramesh Suman,
Cortney L. Jones
City of Antioch
200 H Street
Antioch, CA 94531
Email: planning@antiochca.gov

Via Email Only
Kevin Scudero, Acting Director
Community Development Department
200 H Street
Antioch, CA 94531
Email: planning@antiochca.gov

Zoe Merideth, Senior Planner
Email: zmerideth@antiochca.gov

Re: **Antioch Planning Commission Hearing, Agenda Item 6-1; Wildflower Station Townhomes 2 Multifamily Residential Project (TM-02, AR-23-05)**

Dear Chair Riley, Vice-Chair Webber, Commissioners, Mr. Scudero, and Ms. Merideth:

We are writing on behalf of Contra Costa Residents for Responsible Development ("Contra Costa Residents") to provide comments on Agenda Item 6-1, the Wildflower Station Townhomes 2 Multifamily Residential Project (TM-02, AR-23-05) ("Wildflower Townhomes Project" or "Project") proposed by DeNova Homes, Inc. ("Applicant"). The Project consists of a vesting tentative map to create 19 residential lots for 19 townhome buildings, containing 159 residential units total. The Project site is a 10.35 acre undeveloped site located east of Hillcrest Avenue and west of Wildflower Station Place in the City of Antioch ("City").

The City contends that the Project previously has been analyzed under the California Environmental Quality Act[1] ("CEQA") and that further evaluation is not

[1] Pub. Res. Code ("PRC") §§ 21000 et seq.; 14 Cal. Code Regs. §§ 15000 et seq. ("CEQA Guidelines").

required pursuant to CEQA Guidelines section 15183.[2] Specifically, the City contends that the Project was adequately analyzed in the Antioch Housing, Environmental Hazards, and Environmental Justice Elements Project Draft Environmental Impact Report ("Housing Element EIR") adopted by the City in February 2023, and that additional environmental review is therefore not required for the Project pursuant to section 15183. These conclusions are set forth in the 15183 Consistency Memorandum, which purports to "determine if project-specific impacts would occur that are not adequately covered in [the Housing Element EIR]. To the extent the Housing Element policies and/or actions substantially mitigate a particular project impact, the impact shall not be considered peculiar, pursuant to 15183(f), thus, eliminating the need for further environmental review."[3]

The City's conclusion is not supported by substantial evidence in the record and further CEQA review is required. The City's reliance on section 15183 to avoid any project-specific environmental review is misplaced, as none of the Project's specific impacts were studied in the Housing Element EIR or the 15183 Consistency Memorandum, and the 15183 Consistency Memorandum does not provide evidence that the single Housing Element policy applicable to this Project will substantially mitigate any Project-level impact. Moreover, the Project will result in new or more significant impacts that are peculiar to the Project site. As a result, the Planning Commission lacks substantial evidence to approve the Project.

In particular, Contra Costa Residents' noise expert found that the Project's construction and operational noise impacts were not analyzed and would exceed applicable significance thresholds. These impacts are peculiar to the Project, were not analyzed in the Housing Element EIR and will not be mitigated by any uniformly applied policies or standards. The City also lacks substantial evidence to conclude that the Project would not result in transportation impacts peculiar to the Project site. Neither the Housing Element EIR nor the 15183 Consistency Memorandum conducts a VMT analysis or provides evidence that the Project possesses characteristics exempting it from a detailed VMT analysis. Finally, neither the Consistency Memorandum nor the Housing Element EIR performed any emissions modeling to determine the scope of potential air quality and public health impacts from the Project's construction and operational emissions, in violation of CEQA. The City therefore may not properly rely on CEQA Guidelines section 15183 to avoid further environmental review.

---

[2] March 2024 Wildflower Townhomes Section 15183 Consistency Memorandum ("15183 Consistency Memorandum"), pg. 1.
[3] *Id.* at pg. 9.

We prepared these comments with the assistance of acoustics, noise, and vibration expert Jack Meighan of Wilson Ihrig.[4] As explained below, the Project will have potentially significant air quality, public health, noise and transportation impacts that are peculiar to the project and were not analyzed at a project-level in the Housing Element EIR, or are more severe than previously analyzed by the City. These impacts are not reduced to less than significant levels by the mitigation measures in the Housing Element EIR or any other standard conditions of approval, and therefore require disclosure and mitigation in a project-level Environmental Impact Report ("EIR") before the City can consider approval of the Project.

I. STATEMENT OF INTEREST

Contra Costa Residents is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential public and worker health and safety hazards, and the environmental and public service impacts of the Project. The coalition includes the International Brotherhood of Electrical Workers Local 302, Plumbers & Steamfitters Local 159, Sheet Metal Workers Local 104, Sprinkler Fitters Local 483, along with their members, their families, and other individuals who live and work in the City of Antioch and Contra Costa County.

Contra Costa Residents' individual members live, work, recreate, and raise their families in the City of Antioch and surrounding communities. Accordingly, they would be directly affected by the Project's environmental, health, and safety impacts. Individual members may also work on the Project itself. They will be first in line to be exposed to any health and safety hazards that exist on site.

Contra Costa Residents also has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for businesses and industries to expand in the region, and by making the area less desirable for new businesses and new residents. Indeed, continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduce future employment opportunities.

[4] Mr. Meighan's Comments ("Meighan Comments") and CV are attached hereto as **Attachment A.**

II. LEGAL BACKGROUND

CEQA has two basic purposes, neither of which has the City satisfied in this case. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental impacts of a project before harm is done to the environment.[5] The EIR is the "heart" of this requirement,[6] and has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return."[7] To fulfill this purpose, the discussion of impacts in an EIR must be detailed, complete, and "reflect a good faith effort at full disclosure."[8] An adequate EIR must contain facts and analysis, not just an agency's conclusions.[9]

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring imposition of mitigation measures and by requiring the consideration of environmentally superior alternatives.[10] CEQA imposes an affirmative obligation on agencies to avoid or reduce environmental harm by adopting feasible project alternatives or mitigation measures to address all potentially significant impacts identified in the agency's CEQA analysis.[11] Without an adequate analysis and description of feasible mitigation measures, it would be impossible for agencies relying upon an EIR or other environmental document to meet this obligation.

Following preliminary review of a project to determine whether an activity is subject to CEQA, a lead agency is required to prepare an initial study to determine whether to prepare an EIR or negative declaration, identify whether a program EIR, tiering, or other appropriate process can be used for analysis of the project's environmental effects, or determine whether a previously prepared EIR could be used with the project, among other purposes.[12] CEQA requires an agency to

---

[5] Cal. Code Regs., tit. 14, § 15002, subd. (a)(1) ("CEQA Guidelines"); *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal.App.4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.
[6] *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84.
[7] *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.
[8] CEQA Guidelines, § 15151; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 721-722.
[9] *See Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 568.
[10] CEQA Guidelines, § 15002, subd. (a)(2) and (3); *Berkeley Jets,* 91 Cal.App.4th, at p. 1354; *Laurel Heights Improvement Ass'n v. Regents of the University of Cal.* (1998) 47 Cal.3d 376, 400.
[11] Pub. Resources Code, §§ 21002-21002.1.
[12] CEQA Guidelines, §§ 15060, 15063, subd. (c).

analyze the potential environmental impacts of its proposed actions in an EIR except in certain limited circumstances.[13] A CEQA exemption may be invoked only if expressly authorized by the CEQA statute or guidelines and if there is no possibility of a significant effect on the environment. Exemptions must be narrowly construed and are not to be expanded beyond the scope of their plain language.[14]

CEQA Guidelines Section 15183 provides an exemption for projects which are consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified, *except as necessary to evaluate whether there are project-specific significant impacts which are peculiar to the project or project site.*[15] In relying on section 15183 to approve a project, a lead agency may not forgo further analysis of potentially significant impacts unless it makes certain findings. An agency is required to perform further analysis as to impacts that (1) are peculiar to the proposed project or parcel, (2) were not analyzed as significant effects in a prior EIR for the zoning, community or general plan with which the project is consistent, (3) are potentially significant off-site or cumulative impacts that were not discussed in the prior EIR, or (4) are previously identified significant impacts which, due to substantial new information not known at the time the EIR was certified, are determined to have a more severe impact than discussed in the prior EIR.[16]

Under section 15183(f), an effect of a project on the environment is not considered peculiar to the project or project site if "uniformly applied development policies or standards have been previously adopted …with a finding that the development policies or standards will substantially mitigate the environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect."[17]

Agency determinations under Guidelines section 15183 are reviewed under the substantial evidence standard.[18] In determining whether an agency's findings concerning the use of a statutory exemption from CEQA may be upheld, courts

---

[13] See, e.g., Pub. Resources Code, § 21100.
[14] *Castaic Lake Water Agency v. City of Santa Clarita* (1995) 41 Cal.App.4th 1257.
[15] 14 CCR § 15183(a).
[16] 14 CCR § 15183(b)(1)-(4).
[17] 14 CCR § 15183(f).
[18] *Lucas v. City of Pomona* (2023) 92 Cal.App.5th 508, 538, citing *Concerned Dublin Citizens v. City of Dublin* (2103) 214 Cal.App.4th 1301, 1311; see also, *Hilltop Group v. County of San Diego* (2024) 99 Cal.App.5th 890, 909-10.

review the administrative record to see that substantial evidence supports each element of the exemption.[19] This includes the determination that "uniformly applied development policies or standards" will substantially mitigate the project's environmental effects.[20] Agency findings must specifically address the effect of uniform policies and standards on potential environmental impacts.[21]

Section 15168's two-step inquiry of a program EIR's applicability to later activities holds that "if a later activity would have effects that were not examined in the program EIR, a new initial study would need to be prepared leading to either an EIR or a negative declaration." The City insists that, pursuant to sections 15162 and 15183, the Project is within the scope of the program EIR and no subsequent EIR is required. "Whether a later activity is within the scope of a program EIR is a factual question that the lead agency determines based on substantial evidence in the record."

Here, the Housing Element EIR analyzed impacts at a program level, and did not analyze quantify, or disclose Project-level impacts for issues including transportation, air quality and public health, and noise.

III. THE PROJECT IS NOT EXEMPT FROM FURTHER CEQA REVIEW AND AN EIR IS REQUIRED

The City contends that the Housing Element EIR provides the basis for its determination that no further environmental review of the Project's impacts is required. The 15183 Consistency Memorandum notes that the Project's density of 20.05 dwelling units per acre ("du/ac") is consistent with the development density established in the Housing Element EIR, i.e., 20-25 du/ac, and purports to evaluate whether the Project will have any effects peculiar to the Project or Project site.[22] It goes on to state that "[t]o the extent that the Housing Element policies and/or actions substantially mitigate a particular project impact, the impact shall not be considered peculiar, pursuant to [CEQA Guidelines section] 15183(f), thus, eliminating the requirement for further environmental review."[23]

However, while the Consistency Memorandum recites the requirements of section 15183, it does not actually analyze whether the Project will have any effects

[19] *Lucas*, 92 Cal.App.5th at 538.
[20] 14 CCR § 15183(f).
[21] *Hilltop Group*, 99 Cal.App.5th at 918.
[22] 15183 Consistency Memorandum, pg. 9.
[23] *Id.* at pgs. 8-9.

peculiar to the Project or the Project site. Neither the Housing Element EIR nor the 15183 Consistency Memorandum examine the Project-level effects on environmental impacts such as air quality, health risks, transportation and noise. Nor does the Consistency Memorandum identify any "Housing Element policies and/or practices" that apply to the Project to substantially mitigate the Project's impacts. As discussed below, the City lacks substantial evidence to support the necessary findings to exempt the Project from CEQA review, and the City must prepare and circulate for public review an EIR that analyzes the Project's potentially significant impacts.

A. The City Lacks Substantial Evidence to Support its Conclusions with Respect to the Project's Transportation Impacts

CEQA requires analysis of a project's transportation impacts via analysis of the project's vehicle miles traveled ("VMT").[24] The Housing Element EIR evaluated the VMT impacts of all of the potential new housing sites in the City (including the site for the Wildflower Townhomes Project) and found a significant impact on VMT.[25] To address these impacts, the Housing Element EIR adopted Mitigation Measure TRANS-1, which provides that individual housing development projects (like this one) *that do not screen out from VMT impacts analysis shall provide a quantitative VMT analysis*.[26] Individual projects which result in a significant VMT impact are required to implement travel demand management measures and physical measures to reduce VMT to a less-than-significant level.[27] The Housing Element EIR lists seven criteria that are used to screen projects out of conducting project-level VMT analysis: (1) CEQA-exempt projects, (2) small projects, (3) local-serving uses, (4) proximity to a major transit stop, (5) projects located in low VMT areas, (6) affordable housing, and (7) transportation projects.[28] These criteria screen out projects from performing a full VMT analysis because projects meeting these criteria are presumed to have less-than-significant VMT impacts absent substantial evidence to the contrary.[29]

[24] 14 CCR § 15064.3.
[25] Housing Element EIR, pg. IV.B-27.
[26] *Id.*
[27] *Id.*
[28] *Id.,* pgs. IV.B-21—IV.B-22.
[29] *Id.*

The Housing Element EIR makes clear that it did not analyze VMT impacts from individual housing projects like this one. Nor does the 15183 Consistency Memorandum for this Project analyze the Project's VMT impacts. Instead, the City asserts that because the 15183 Consistency Memoranda concludes that the Project qualifies for the Guidelines section 15183 exemption, the Project "screens out" from having to perform a quantitative VMT analysis as required under Housing Element EIR mitigation measure TRANS-1. Specifically, the 15183 Consistency Memorandum states:

> "As demonstrated through this 15183 Consistency Memorandum, the proposed project would not result in significant impact that is peculiar to the project or project site, a significant effect that was not identified in the Housing Element EIR, or a substantially more severe significant effect related to transportation beyond what was identified in the Housing Element EIR. Therefore, pursuant to Section 15183 of the CEQA Guidelines, the proposed project qualifies for exemption from further environmental review under CEQA. Because the proposed project would be considered exempt from CEQA, Mitigation Measure TRANS-1 is not applicable."

The City's position is legally and logically flawed. The City's argument employs circular reasoning by claiming that because the Project is exempt from CEQA, it does not need to conduct a VMT analysis, citing the Housing Element EIR screening criteria. This reasoning is fundamentally flawed because the argument's premise ("the Project is exempt from CEQA") *assumes* the conclusion rather than supporting it. The City argues that an exemption from CEQA means an exemption from VMT analysis, but the CEQA exemption itself is predicated on the absence of significant environmental impacts peculiar to the Project, including transportation impacts which a VMT analysis is designed to determine. In other words, the City claims that it need not evaluate the Project's potentially significant VMT impacts because the Project is exempt from CEQA, but the exemption determination itself rests on unsupported assumptions regarding the lack of Project-specific peculiar impacts. The City lacks any evidence to support the conclusion that the Project will not have significant VMT impacts peculiar to the Project or Project site because it performed no Project-specific VMT analysis. By bypassing the VMT analysis this way, the City avoids an analysis that could reveal significant impacts, and preclude the use of the section 15183 exemption. This approach undermines the purpose of CEQA, which is to ensure that potential environmental impacts are identified, disclosed and mitigated.

While the Consistency Memorandum relies solely on the "CEQA Exemption" screening criterion, the Project does not qualify for any of the other screening criteria set out in the Housing Element EIR. The Project is not a "Small Project," defined as having 10,000 square feet or less[30] of non-residential space or 10 residential units or less. The Project will not consist of "Local-Serving Uses," as this screening criteria is intended to apply to commercial uses and is not relevant to residential projects.[31] The Project does not qualify for the "Proximity to a Major Transit Stop" VMT screening criteria, as this criteria is limited to the 0.5 mile (walking radius) surrounding the Antioch BART and Antioch Amtrak stations, and the Housing Element EIR found that none of the housing sites analyzed fall within this boundary.[32] The Project does not include any affordable housing, and therefore does not screen out from VMT analysis on that basis. Nor is the Project a "Transportation Project." Finally, neither the 15183 Consistency Memoranda nor the Housing Element EIR evaluates whether the Project is in a "Low VMT Area," defined as having home-based VMT per resident at or below 85% of the Antioch citywide average.[33] This determination requires TAZ-level screening using Contra Costa Countywide VMT maps and Travel Demand Model ("CCTA Model") results.[34] The Housing Element EIR, due to its programmatic scope, did not conduct this screening. [35] It does acknowledge, however, that such analysis may be necessary for individual projects.[36] Similarly, the 15183 Consistency Memoranda omits TAZ-based screening. Therefore, the City has not provided substantial evidence to support a finding that the Project is located in a low VMT area.

As discussed above, the City's failure to perform a quantitative VMT analysis prevents an understanding of the extent to which the Project's VMT is expected to exceed the significance threshold, or the nature of mitigation required to reduce such impacts to below the threshold. The City's conclusion lacks the support of substantial evidence because it neither includes a site-specific VMT analysis nor demonstrates that the Project qualifies for screening under any recognized exemption. Accordingly, the City must prepare a Project-specific EIR that includes a quantitative VMT analysis and appropriate mitigation.

---

[30] *Id.*
[31] *Id.* at pg. IV.B-24.
[32] *Id.*
[33] *Id.* at pg. IV.B-22.
[34] *Id.* at pg. IV.B-24.
[35] *Id.*
[36] *Id.*

B. The Project Will Have Significant, Unmitigated Air Quality and Public Health Impacts That are More Severe than Previously Analyzed

The City has not performed any emissions modeling to determine potential impacts of Project construction or operations; neither the 15183 Consistency Memorandum nor the Housing Element EIR analyzed any Project site-specific air quality impacts or identified any sensitive receptors near the Project site. Under CEQA Guidelines section 15168(c), these air quality and public health impacts are effects that were not examined in the Housing Element EIR, requiring a new initial study leading to either an EIR or negative declaration. The 15183 Consistency Memorandum includes a cursory discussion of the Project's potential air quality impacts, as follows:

> "The proposed project would be consistent with the Housing Element and, thus, was anticipated by the City and considered under the Housing Element EIR analysis. Accordingly, the proposed project would not result in any new significant effects related to air quality. However, the Housing Element EIR requires mitigation measures related to construction emissions of criteria air pollutant emissions from future housing developments (AIR-1), operational emissions of criteria air pollutant emissions from future housing developments (AIR-2), and health risks related to the generation of toxic air contaminants (TACs) and particulate matter (PM) 2.5 microns in diameter ($PM_{2.5}$) during construction and operation of future housing developments (AIR-3a and AIR-3b)."[37]

However, the Consistency Memorandum goes on to state that only the Housing Element EIR's air quality mitigation measure AIR-3a is applicable to this Project.[38] But because the measure is structured so that development projects choose one option or the other, only part of Mitigation Measure AIR-3a is applicable to the project.[39] Specifically, the proposed project will be required to equip all off-road diesel equipment with Tier 4 engines and the Applicant must prepare a Construction Emissions Minimization Plan for all identified reduction measures.[40] Based on the Project's size, location and characteristics, none of the other Housing

[37] 15183 Consistency Memorandum, pg. 10.
[38] *Id.* at pg. 11.
[39] *Id*
[40] *Id.*

Element EIR's air quality mitigation measures would apply to this Project. The City then concludes, without any supporting evidence, that "[i]mplementation of Mitigation measure AIR-3a would ensure the proposed project would not result in a significant impact that is peculiar to the project or the project site, would not be identified as a significant effect in the Housing Element EIR, and would not result in a more severe adverse impact than the significant effects previously identified within the Housing Element EIR."[41] This conclusion lacks the support of any evidence, let alone substantial evidence as required by CEQA.

The Housing Element EIR expressly recognized that the use of construction equipment during construction of housing developments like the Project can pose health risks related to the generation of TACs and $PM_{2.5}$.[42] DPM is a known toxic air contaminant ("TAC") carcinogen that contains numerous harmful compounds. Diesel exhaust has been linked to a range of serious health problems including an increase in respiratory disease, lung damage, cancer, and premature death.[43,44,45] Fine DPM is deposited deep in the lungs in the smallest airways and can result in increased respiratory symptoms and disease; decreased lung function, particularly in children and individuals with asthma; alterations in lung tissue and respiratory tract defense mechanisms; and premature death.[46] Exposure to DPM increases the risk of lung cancer. It also causes non-cancer effects including chronic bronchitis, inflammation of lung tissue, thickening of the alveolar walls, immunological allergic reactions, and airway constriction.[47] DPM is a TAC that is recognized by state and federal agencies as causing severe health risk because it

---

[41] *Id.*
[42] Housing Element EIR, pgs. IV.C-21—23.
[43] California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Staff Report, June 1998; see also California Air Resources Board, Overview: Diesel Exhaust & Health, https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health#:~:text=Diesel%20Particulate%20Matter%20and%20Health&text=In%201998%2C%20CARB%20identified%20DPM,and%20other%20adverse%20health%20effects.
[44] U.S. EPA, Health Assessment Document for Diesel Engine Exhaust, Report EPA/600/8-90/057F, May 2002.
[45] Environmental Defense Fund, Cleaner Diesel Handbook, Bring Cleaner Fuel and Diesel Retrofits into Your Neighborhood, April 2005; http://www.edf.org/documents/4941_cleanerdieselhandbook.pdf, accessed July 5, 2020.
[46] California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Staff Report, June 1998.
[47] Findings of the Scientific Review Panel on The Report on Diesel Exhaust as adopted at the Panel's April 22, 1998, Meeting.

contains toxic materials, unlike $PM_{2.5}$ and PM_{10}.[48] Despite the Housing Element EIR's express recognition of the health risks from construction equipment emissions of TACs from construction of projects like this one, the City failed to conduct a quantitative health risk analysis ("HRA") and omitted a comparison of the Project's health risk impacts to the Bay Area Air Quality Management District's ("BAAQMD") threshold of 10 in one million.[49]

The City's omission of an HRA also conflicts with the Office of Environmental Health Hazard Assessment's ("OEHHA") *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*. These guidelines recommend that all short-term projects lasting at least 2 months assess cancer risks and that exposure from projects lasting more than 6 months should be evaluated for the duration of the project.[50] Here, the Project's construction is expected to take longer than six months.[51] Because the anticipated duration of the Project's construction would exceed the 2-month and 6-month requirements set forth by OEHHA, a quantified HRA under OEHHA guidance should have been prepared to evaluate the Project for its entire duration.

Therefore, based on the current record, the City cannot conclude that implementation of AIR-3a will prevent significant new air quality impacts associated with the Project. As a result, the City may not rely on the section 15183 exemption to approve this Project, and an EIR must be prepared and circulated for public review.

C. The City Lacks Substantial Evidence to Support its Conclusions with Respect to the Project's Noise Impacts

The City has not performed any site-specific analysis of the Project's potential noise impacts. Neither the Housing Element EIR nor the 15183 Consistency

---

[48] Health & Safety Code § 39655(a) (defining "toxic air contaminant" as air pollutants "which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal act (42 U.S.C. Sec. 7412 (b)) is a toxic air contaminant.")

[49] BAAQMD, Regulation 11-18 Reduction of Risk From Air Toxic Emissions at Existing Facilities, p. 5.

[50] OEHHA, *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, pgs. 8-18, available at: https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0.

[51] 15183 Consistency Memo, pg. 11.

Memorandum includes any analysis of ambient noise in the area of the Project site, modeling of the Project's construction or operational noise impacts, or identification of sensitive receptors near the Project site. The 15183 Consistency Memorandum contains no discussion whatsoever regarding whether the Project may have peculiar noise impacts necessitating further CEQA review. Under CEQA Guidelines section 15168(c), these Project-specific noise impacts were not examined in the Housing Element EIR, requiring a new initial study leading to either an EIR or negative declaration.

The Housing Element EIR recognizes that for individual projects like this one, "construction activities could generate exterior noise levels that exceed the City's noise objectives established under General Plan Policy 11.8.2."[52] The Housing Element EIR also states that "[i]ndividual housing developments…would result in a potentially significant impact if they cause a new exceedance of the General Plan noise objectives, or an audible (3.0 dBA) increase in areas where the General Plan noise objectives are already exceeded as the result of existing development."[53] General Plan Policy 11.8.2 (f) requires a detailed noise attenuation study to be prepared by a qualified acoustical engineer to determine appropriate mitigation and ways to incorporate such mitigation into project design and intervention. Finally, the Housing Element EIR points out that General Plan Policy 11.8.2 requires development adjacent to occupied noise sensitive land uses to implement a construction-related noise mitigation plan that should depict the location of construction equipment and how the noise from this equipment will be mitigated during construction through the use of noise reduction methods listed in Policy 11.8.2(o).[54]

Therefore, while the City expressly recognizes that individual housing projects like this one may have significant noise impacts on existing nearby sensitive receptors and requires studies and mitigation to reduce noise impacts, the 15183 Consistency Memo simply assumes without any analysis or evidence that the proposed Project "would not result in new significant impacts or substantially more significant impacts related to" impacts including noise.[55] It does not analyze or even consider whether the Project would "cause a new exceedance of the General Plan noise objectives, or an audible (3.0 dBA) increase in areas where the General Plan noise objectives are already exceeded." Nor does it consider whether Housing

[52] Housing Element EIR, pg. IV.L-12.
[53] *Id.* at pg. IV.L-10.
[54] *Id.* at pg. IV.L-12.
[55] 15183 Consistency Memorandum, pg. 13.

Element policies and/or actions might substantially mitigate the Project's noise impacts. At a minimum, to demonstrate consistency with the Housing Element EIR, it must consider Project impacts in relation to General Plan Policy noise objectives, and must prepare a construction-related noise mitigation plan depicting the location of construction equipment and how the noise from this equipment will be mitigated during construction. Without any actual analysis, or consideration of any applicable uniformly applied development policies or standards, there is no support whatsoever for the conclusion that the Project will not have peculiar noise impacts.

Moreover, Mr. Meighan provides substantial evidence that the Project will cause new potentially significant noise impacts. First, the 15183 Consistency Memorandum lacks any measurement or disclosure of ambient noise conditions in the area of the Project site. This violates CEQA's requirement that a lead agency consider both the "absolute noise level" associated with a project as well as the increase in the level of noise that will result from a project.[56] This also fails to disclose a potentially significant operational noise impact. Based on information provided in the 15183 Consistency Memoranda, Mr. Meighan estimates the Project's nighttime operational noise levels to be 53 dBA at the Townhomes to the Northeast of the Project site.[57] Mr. Meighan goes on to explain that nighttime noise levels in suburban areas can be as quiet as 40 dBA.[58] When this ambient level is compared to the Project's estimated noise levels, the Project would far exceed the City's significance threshold of 3 dBA over ambient levels.[59] This is a new significant impact that was not addressed in the Housing Element EIR or the 15183 Consistency Memoranda and would not be mitigated even if the Housing Element EIR and General Plan noise policies and standards are applied.[60] In order to mitigate these impacts, Mr. Meighan suggest shielding HVAC units' noise emissions to the southeast.[61]

Second, Mr. Meighan provides substantial evidence that the Project will have significant construction noise impacts. As explained in Mr. Meighan's comments, the City fails to set its own construction noise significance threshold, leaving the

---

[56] *Gardiner Farms, LLC v. County of Kern* (2020) 45 CA5th 814, 887, 893; *Keep Our Mountains Quiet v. County of Santa Clara* (2015) 236 CA4th 714, 733.
[57] Meighan Comments, pg. 6.
[58] *Id.*
[59] *Id.*
[60] *Id.* at pgs. 2-3.
[61] *Id.* at pg. 6.

City's conclusion unsupported by any meaningful standard of evaluation.[62] Because of this, Mr. Meighan's analysis assumes a significance threshold of 75 dBA, which comes from the Los Angeles Municipal Code.[63] Based on information provided in the 15183 Consistency Memoranda, Mr. Meighan estimates the Project's construction noise levels to range from 80 dBA to 85 dBA.[64] This exceeds the significance threshold by at least 5 dBA, which is a new significant impact that the Housing Element EIR and the 15183 Consistency Memoranda did not address. To reduce this impact, Mr. Meighan proposes the use of a temporary soundwall for the Project.[65]

Third, Mr. Meighan explains that the City fails to conduct a screening level construction vibration analysis as required by the Housing Element EIR.[66] The Housing Element EIR states that "if sensitive receptors are located within these buffer distances [about 115 feet], future developments under the Project should prepare a screening level vibration analysis for City review in accordance with General Plan Policy 11.8.2(k)."[67] Despite the closest structures from the Project site being only 90 feet away, the City does not conduct this analysis. Mr. Meighan explains that a thorough evaluation of the Project's potential vibration impacts is "vital" because, if those impacts are significant, they could interfere with people's daily lives and potentially damage nearby homes.[68]

For the above reasons, the City cannot rely on the 15183 CEQA exemption. The City must prepare an EIR that adequately analyzes the Project's potentially significant noise impacts by establishing ambient noise levels for the Project site, comparing them against applicable noise significance thresholds, and proposing mitigation for any significant impacts found.

IV. THE CITY LACKS SUBSTANTIAL EVIDENCE TO MAKE THE REQUIRED FINDINGS TO APPROVE THE PROJECT'S VESTING TENTATIVE SUBDIVISION MAP

The Project requires the City to approve a Vesting Tentative Subdivision Map ("VTSM") for condominium purposes that would subdivide the project site for

[62] *Id.*
[63] *Id.* at pg. 5.
[64] *Id.*
[65] *Id.*
[66] *Id.* at pg. 6.
[67] *Id.*
[68] *Id.*

the development of 19 townhome buildings, containing a total of 159 residential units.[69] However, as discussed above, the City fails to adequately analyze or mitigate several new project-specific environmental impacts that were not addressed by the Housing Element EIR. As a result, the City cannot make the requisite findings to approve the Project's VTSM.

California's Subdivision Map Act precludes the approval of a tentative map where the design or improvement of the proposed subdivision is not consistent with the applicable general plan, is likely to cause substantial environmental damage, or is likely to cause serious public health problems.[70]

Additionally, Antioch Municipal Code Section 9-4.323 states that a VTSM may be made conditional or denied if any of the following is determined:

- A failure to do so would place the residents of the subdivision or the immediate community, or both, in a condition dangerous to their health or safety, or both; or
- The condition or denial is required in order to comply with state or federal laws.

As detailed in our comments and those of our noise expert, there is substantial evidence that the Project may result in several potentially significant environmental impacts, including: (1) construction and operational noise, (2) VMT, and (3) air quality and related health risks. These impacts remain unaddressed and could pose serious risks to public health and safety—both for future subdivision residents and the surrounding community. Therefore, the City cannot make the required findings under the Subdivision Map Act and Antioch's Municipal Code to approve the VTSM until all of the Project's potentially significant impacts are thoroughly analyzed and effectively mitigated.

[69] Staff Report for the Antioch Planning Commission Regular Meeting of July 16, 2025, pg. 1
[70] Government Code § 66474(b), (e) and (f).

V. CONCLUSION

As discussed herein, the City lacks substantial evidence to rely on a CEQA Guidelines section 15183 exemption for Project approval. The Project will result in potentially significant project-level impacts which are peculiar to the Project and Project site and will require mitigation. Therefore, the Project cannot be approved until the City complies with CEQA by preparing an EIR.

Sincerely,

Alaura McGuire

Alaura McGuire

Attachment
ARM:acp

EXHIBIT A

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

CALIFORNIA
WASHINGTON
NEW YORK

WI #24-001.32

July 12, 2025

Alaura R. McGuire
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

SUBJECT: **Wildflower 2 Section 15183 Consistency Memorandum**
Antioch, CA
Review and Comments on the Initial Study Noise Analysis

Dear Ms. McGuire,

As requested, we have reviewed the information and noise impact analysis for the Wildflower 2 Townhomes Project in Antioch, CA. The project consists of construction and operation/occupancy of 168 townhome units along Hillcrest Avenue, northeast of the intersection with Davidson Drive and Deer Valley Road. This letter is based on the Section 15183 Consistency Memorandum prepared by Raney Planning and Management, dated March 2024. The site is surrounded by noise-sensitive receivers, most notably existing townhomes to the northeast of the site along Wildflower Station Place.

Wilson Ihrig is an acoustical consulting firm that has practiced exclusively in the field of acoustics since 1966. During our 58 years of operation, we have prepared hundreds of noise studies for Environmental Impact Reports and Statements. We have one of the largest technical laboratories in the acoustical consulting industry. We also utilize industry-standard acoustical programs such as Roadway Construction Noise Model (RCNM), SoundPLAN, and CadnaA. In short, we are well qualified to prepare environmental noise studies and review studies prepared by others.

Adverse Effects of Noise[1]

Although the health effects of noise are not taken as seriously in the United States as they are in other countries, they are real and, in many parts of the country, pervasive.

Noise-Induced Hearing Loss. If a person is repeatedly exposed to loud noises, he or she may experience noise-induced hearing impairment or loss. In the United States, both the Occupational Health and Safety Administration (OSHA) and the National Institute for Occupational Safety and

[1] More information on these and other adverse effects of noise may be found in *Guidelines for Community Noise*, eds B Berglund, T Lindvall, and D Schwela, World Health Organization, Geneva, Switzerland, 1999. (https://www.who.int/publications/i/item/a68672)

Health (NIOSH) promote standards and regulations to protect the hearing of people exposed to high levels of industrial noise.

Speech Interference. Another common problem associated with noise is speech interference. In addition to the obvious issues that may arise from misunderstandings, speech interference also leads to problems with concentration fatigue, irritation, decreased working capacity, and automatic stress reactions. For complete speech intelligibility, the sound level of the speech should be 15 to 18 dBA higher than the background noise. Typical indoor speech levels are 45 to 50 dBA at 1 meter, so any noise above 30 dBA begins to interfere with speech intelligibility. The common reaction to higher background noise levels is to raise one's voice. If this is required persistently for long periods of time, stress reactions and irritation will likely result.

Sleep Disturbance. Noise can disturb sleep by making it more difficult to fall asleep, by waking someone after they are asleep, or by altering their sleep stage, e.g., reducing the amount of rapid eye movement (REM) sleep. Noise exposure for people who are sleeping has also been linked to increased blood pressure, increased heart rate, increase in body movements, and other physiological effects. Not surprisingly, people whose sleep is disturbed by noise often experience secondary effects such as increased fatigue, depressed mood, and decreased work performance.

Cardiovascular and Physiological Effects. Human's bodily reactions to noise are rooted in the "fight or flight" response that evolved when many noises signaled imminent danger. These include increased blood pressure, elevated heart rate, and vasoconstriction. Prolonged exposure to acute noises can result in permanent effects such as hypertension and heart disease.

Impaired Cognitive Performance. Studies have established that noise exposure impairs people's abilities to perform complex tasks (tasks that require attention to detail or analytical processes) and it makes reading, paying attention, solving problems, and memorizing more difficult. This is why there are standards for classroom background noise levels and why offices and libraries are designed to provide quiet work environments.

Introduction

Under Section 15183 of the California Code, a project that is consistent with development density established by a General Plan for which an EIR has been certified is exempt from CEQA review except for project-specific impacts peculiar to the project or project site. Per 15183(f), an impact is not considered peculiar if uniformly applied development standards or policies have been previously adopted by the City with a finding that the development standards or policies would substantially mitigate the impact when applied to future projects, unless substantial new information shows otherwise.

According to the Consistency Memorandum, the City considered uniformly applied development standards and policies in the Draft Environmental Impact Report entitled Antioch Housing, Environmental Hazards, and Environmental Justice (EJ) Elements (Housing Element DEIR)[2]. None of these policies is mentioned in the Consistency Memorandum, and there is no evidence that they would mitigate the Project's noise impacts in any event. The Housing Element DEIR's operational

[2] https://www.antiochca.gov/fc/community-development/planning/housing-element/DHEEIR-DEIR_22_0902.pdf

noise section states "General Plan Policy 11.8.2 (f) requires a detailed noise attenuation study to be prepared by a qualified acoustical engineer to determine appropriate mitigation and ways to incorporate such mitigation into project design and implementation." And that "compliance with Code of Ordinance 9-5.1901 (A) and General Plan Policy 11.8.2 (f) would ensure that future development under the Project would not result in a substantial temporary or permanent increase in ambient noise levels from stationary sources, and this impact would be less than significant" (Housing Element DEIR page IV.L-13).

Similarly, for construction noise, General Plan Policy 11.8.2 "requires development adjacent to occupied noise sensitive land uses to implement a construction-related noise mitigation plan and requires that all construction equipment utilize noise reduction features" Additionally, the construction-related noise mitigation plan should "depict the location of construction equipment and how the noise from this equipment will be mitigated during construction through the use of noise reduction methods" that are listed in General Plan Policy 11.8.2 (m) (DEIR page IV.L-12).

General Plan 11.8.2 (f) and (m) proceed to list several design guidelines that reduce noise. None of these are guaranteed to reduce noise, depending on the unique characteristics of each site. In Section m, mufflers are already included in construction noise source models of the cited FTA database, which takes its source values from measurements of modern equipment already equipped with mufflers. Nighttime construction restrictions do not mitigate daytime noise levels. Strategic staging will reduce the length of unnecessary noise impacts, but will not mitigate the worst-case construction noise scenarios when necessary activities occur adjacent to sensitive uses. Similarly for section f, most of these best practices do not mitigate worst-case noise and are already included in modeling assumptions. Strategic project design and orientation will reduce some potential impacts. However, this does not preclude there being operational noise impacts, either due to the constraints set by the geometry of each individual site plan, or project orientation that was set by considerations other than efficiency of reducing on-site noise.

The Housing Element DEIR establishes that the general plan will reduce noise to less than significant if followed, but the same DEIR cites the general plan requirements that projects which can result in the "development of proposed uses could result in a significant increase in noise a detailed noise attenuation study to be prepared by a qualified acoustical engineer to determine appropriate mitigation and ways to incorporate such mitigation into project design and implementation" (DEIR page IV.L-13). Those steps have not been taken here, and we believe that this project has the potential to result in a significant increase in noise and vibration, and thus a detailed analysis is required, as detailed in this letter.

Construction Noise Impacts are Potentially Significant.

To estimate construction noise, the Federal Highway Administration's Roadway Construction Noise Model (RCNM)[3] was used for this analysis. Typically, multiple pieces of equipment are used in a construction noise analysis, based on a realistic estimation of a construction environment where multiple activities occur simultaneously. Up to three pieces of equipment were modeled at once as a conservative estimate, based on typical construction procedures and timelines. The one exception to this was pile driving, which is a typically more intense procedure than most construction methods.

[3] https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnmcover.cfm

Program default usage factors, or the percentage of time the equipment generally operates, were used for all pieces of analyzed equipment. Source levels typically used in a construction noise analysis are shown in Table 1.

Table 1: Typical Construction Equipment Noise Levels

Equipment	Lmax Sound Level at 50 feet (dBA)	Utilization %
Backhoe	77.6	40%
Compactor (ground)	80.0	20%
Compressor (air)	78.0	40%
Concrete Mixer Truck	79.0	40%
Concrete Pump Truck	81.0	20%
Concrete Saw	89.6	20%
Crane	81.0	16%
Dozer	81.7	40%
Excavator	80.7	40%
Forklift	75.0	10%
Pneumatic Tools	85.0	50%
Generator	81.0	50%
Mounted Impact Hammer (hoe ram)	90.0	20%
Impact Pile Driver	95.0	20%
Front End Loader	79.0	40%
Paver	77.0	50%
Roller	80.0	20%
Tractor	84.0	40%
Welder / Torch	73.0	40%
Source: RCNM 1.1		

The results of this analysis at the closest sensitive receiver, which are the townhomes approximately 90 feet northeast of the project boundary[4], are shown in Table 2.

Table 2: Modeled Noise Levels from the Proposed Project and Nearest Sensitive Receiver

Noise Source(s)	Modeled Noise Level (dBA)
Impact Pile Driver Only	83
Impact Pile Driver + Pneumatic Tools + Concrete Saw	85
Concrete Saw + Pneumatic Tools	80

City of Antioch General Plan[5] section 11.6.2i-n addresses construction noise. It limits construction hours to 7am to 7pm Monday through Saturday. However, during daytime hours, no limits are set.

[4] This is measured via google earth to the project site
[5] https://www.antiochca.gov/fc/community-development/planning/Antioch_Adopted_General_Plan.pdf

Even if the city does not set its own construction noise daytime limits, the IS should set thresholds based on other similar documents. For example, the County of Los Angeles code has a construction noise limit of 75 dBA[6]. Certainly, that has no jurisdiction for this project, but other government agencies and other municipalities do have daytime construction noise limits. It is the responsibility of the project applicant to find an applicable guideline to use and determine if noise levels will create an adverse impact on the community. If the applicant finds, chooses and properly cites another threshold that they feel is more appropriate, it is within their right to do so. Many such thresholds are based on ambient noise levels, which are not present here. Either way, the IS must be revised to include such a threshold to evaluate, identify, and potentially mitigate construction noise impacts.

All three modeled scenarios yield noise levels that match or exceed the 75 dBA construction noise guideline. As it currently stands, this is an exceedance of the recommended construction noise threshold which would require mitigation, such as a temporary soundwall. A study should be developed, consistent with the General Plan Policy 11.8.2, that shows how implementation of recommended barriers reduce noise levels below significance limits.

Operational Noise Impacts are Potentially Significant.

Operational noise from the project may represent long-term changes in the surrounding noise environment for nearby receptors. Typically, operational noise sources can include rooftop mechanical units and noise from outdoor spaces and balconies. In order to model the noise, the following assumptions were used:

- Mechanical equipment, such as HVAC units, can generate sound power levels as high as 91 dBA[7].
- The HVAC units would be located on building rooftops and are 10 feet behind the edge of the building.
- The distance from the new buildings to the residence to the southeast is 180 feet.
- Three units were assumed, 10 feet apart
- 4 dB of reduction was assumed from a rooftop parapet
- HVAC systems may run constantly, especially in the City of Antioch where summer average heat can reach as high as 90 degrees Fahrenheit[8].

Based on the above assumptions, the potential nighttime operational noise levels are shown in Table 3. No rooftop amenity space was indicated in the Initial Study, so it was not studied. If more detailed plans show balconies or rooftop amenity space, those should be analyzed as well.

[6] https://codelibrary.amlegal.com/codes/los_angeles/latest/lamc/0-0-0-193925
[7] https://www.americanstandardair.com/content/dam/Trane/en-engineer/products/rooftopunits/Voyager/Voyager%20III/RT-PRC022-E4_0513.pdf, page 23
[8] https://weatherspark.com/y/1111/Average-Weather-in-Antioch-California-United-States-Year-Round

Table 3: Predicted Project Operational Noise Levels

Receiver	Modeled Noise Level (dBA)	Noise Criteria	Exceedance
Townhomes to the Northeast	53	n/a[a]	Unknown
[a] Without measured ambient levels, increases over the ambient are impossible to determine.			

Since there is no ambient measurement, there is no criteria, because nighttime criteria levels are typically based on ambient levels. Suburban areas at night can be as quiet as 40 dBA[9]. Based on the housing element DEIR, a significance threshold is used in the city of 3 dBA over ambient limits, of which this scenario exceeds. Due to the proximity of highway SR-4, ambient levels may be higher than this, but this is why it is important to measure ambient noise levels to establish a baseline. The available Project plans are unclear as to the placement of HVAC units. More developed plans may show an HVAC arrangement that is less intrusive, or ambient measurements may present a higher criterion. But the potential for significant impacts do exist, and more thorough study is needed.

The project has the potential to result in significant operational noise levels, which should be considered in a noise study, as required by General Plan Policy 11.8.2. This noise study should determine potential mitigation measures, such as shielding of the HVAC units' noise emissions to the southeast, to reduce community exposure to excessive noise. The noise study must also measure ambient noise levels and determine if the increase over ambient levels would be significant.

Construction Vibration Impacts are Potentially Significant.

The DEIR on pages IV.L-14 and IV.L-15 describes the construction vibration analysis used for housing with the city limits of Antioch, based on procedures and thresholds found in the Caltrans *Transportation and Construction Vibration Guidance Manual* and the Federal Transit Administration *Transit Noise and Vibration Impact Assessment Manual.* The DEIR states that "a buffer distance of about 115 feet" is required "to protect vibration sensitive structures (below the 0.12 in/sec criterion in Table IV.L-4)." The closest structure for this project is 90 feet away. The DEIR continues, "if sensitive receptors are located within these buffer distances, future developments under the Project should prepare a screening level vibration analysis for City review in accordance with General Plan Policy 11.8.2 (k)." This was not completed for this project as required by the City and should be part of a noise study associated with this project. The DEIR continues, stating that if the "screening level analysis shows that construction has the potential to result in damage to structures" then a "detailed vibration impact assessment must be prepared by a structural engineer or other appropriate professional to determine appropriate design means and methods of construction to avoid the potential damage" (DEIR pages IV.L-14 and IV.L-1). This is vital to study, as a potential impact would not just impact people's day to day lives, but could result in damage to nearby housing, and thus should be studied more thoroughly.

[9] https://ehs.yale.edu/sites/default/files/files/decibel-level-chart.pdf

Baseline Noise not Established.

CEQA requires evaluation of whether a project would cause a "substantial temporary or permanent increase in ambient noise levels." Without knowing how loud the environment is, it is impossible to determine if the new project will increase noise in the surrounding community. Baseline noise measurements are the preferred way to determine background noise sources. These measurements serve as a crucial reference point for evaluating the potential noise impacts of proposed projects or activities. Without establishing the baseline noise conditions before any new development occurs, decision-makers cannot effectively determine whether the project complies with noise regulations nor identify any potential adverse effects on the surrounding environment and communities. Given the proximity to both local streets and highway SR-4 along with noise from nearby residences, as well as shielding from nearby structures, noise levels should be physically measured to be accurately determined.

The Federal Transit Administration's 2018 Transit Noise and Vibration Impact Assessment Manual[10] (FTA Manual) Appendix E recommends a minimum of three one-hour Equivalent Sound Level (Leq) noise measurements (peak-hour roadway traffic, typical midday conditions, and typical nighttime conditions) to estimate the Day-Night Sound Level (Ldn) at site, which can be used to establish baseline noise conditions for the project, including the Community Noise Equivalent Level (CNEL). An EIR should be prepared with these baseline noise measurements to properly describe the noise environment.

Conclusions

Considering the potentially significant impacts from construction and operational noise and vibration on the surrounding community, it is imperative that an EIR be conducted to disclose and analyze these potentially significant impacts. Failure to evaluate these impacts would be a violation of CEQA's core purpose of providing a transparent and comprehensive assessment of a project's environmental effects.

Very truly yours,
WILSON IHRIG

Jack Meighan
Associate

meighan - updated wildflower noise analysis.docx

[10] https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

JACK MEIGHAN

Associate

Jack joined Wilson Ihrig in 2021 and is an experienced acoustics engineer with expertise in projects involving rail transit systems, highways, CEQA analysis, environmental noise reduction, mechanical drawing reviews, and construction noise and vibration mitigation. He has hands-on experience with project management, including client coordination and presentations, as well as in designing, developing, and testing MATLAB code used in acoustics applications. Additionally, his expertise includes taking field measurements, developing test plans and specifying, purchasing, setting up and repairing acoustic measurement equipment. He has experience in using Traffic Noise Model (TNM), CadnaA, EASE, Visual Basic, LabView, and CAD software.

Education

- B.S. in Mechanical Engineering, University of Southern California, Los Angeles, CA

Project Experience

Metro Regional Connector, Los Angeles CA
Planned, took, and processed measurements as part of a team to determine the effectiveness of floating slab trackwork for a new subway in downtown Los Angeles that travels below the Walt Disney Concert Hall and the Colburn School of Music.

Rodeo Credit Enterprise CEQA Analysis for New Construction, Palmdale, CA
Wrote an accepted proposal and executed it for a noise study project to determine noise mitigation requirements on a new housing development. Led all aspects of the project and managed the budget during all phases of project completion. Completed 5 separate projects of this type for this developer.

Blackhall Studios, Santa Clarita, CA
Led the vibration measurement effort for a new soundstage directly adjacent to an existing freight and commuter rail line. Tested equipment, processed data, and analyzed results to determine the vibration propagation through the soil to the proposed soundstage locations, and was part of the team that developed mitigation techniques for the office spaces directly next to the rail line.

Octavia Residential Condos CEQA Study, San Francisco, CA
Calculated the STC ratings for the proposed windows to meet Title 24 requirements, modeled the acoustic performance of floor and ceiling structures, researched noise codes, helped with a mechanical design review, and wrote a report summarizing the results for a new Condominium project being developed in San Francisco.

San Diego International Airport Terminal I Replacement, CA
Conducted interior noise and vibration measurements, analyzed measurement data to help determine project criteria, modeled the existing and future terminals in CadnaA, and was part of a team that did a complete HVAC analysis of the entire terminal, as part of a CEQA analysis where a new terminal for the airport is being designed.

Five Points Apartments Noise Study, Whittier, CA
Took measurements, researched sound data and solutions, and recommended mitigation for a new apartment complex that was located next to an existing car wash, as part of a CEQA review.

USC Ellison Vibration Survey, Los Angeles, CA
Conducted vibration measurements as part of a survey to determine the effectiveness of vibration isolation platforms that are used to insulate cell growth in a cancer research facility. Determined the effectiveness and presented this information to the client. Researched and recommended a permanent monitoring system so the client could view data in real time.

TEN50 Condos 'Popping' Noise Investigation, Los Angeles, CA
Was part of a team that investigated the noise source of an unwanted popping noise in luxury condos in Downtown Los Angeles. Helped isolate the noise source location with accelerometers to determine where vibrations were occurring first and used an acoustic camera to determine where in the condo the noise was coming from.

2000 University Project, Berkely, CA
Wrote a construction noise monitoring plan based on environmental noise calculations, wrote a report summarizing the results, and attending a meeting with the client to discuss options.

Bay Area Rapid Transit (BART) On-Track, CA, San Francisco Bay Area, CA*
Day to day project manager, responsible for meetings, presentations, and coordination with the client for an ongoing noise study on the BART system. Developed MATLAB code to process measurements and determine areas where high corrugation was present, contributing to excessively high in-car noise levels. Performed noise measurements inside both the right of way and the vehicle cabin, in addition to rail corrugation measurements.

California I-605/SR-60 Interchange Improvement, Los Angeles, CA*
Developed a noise model of the area that predicted sound levels for abatement design, in addition to conducting noise measurements and analysis. Led the Team in use of the FHWA Traffic Noise Model Software for the project, involving three major highways and two busy interchanges extending over 17 miles in southern California.

Sound Transit On-Track, Seattle, WA*
Took measurements, fixed equipment, and developed software in MATLAB to process Corrugation Analysis Trolley measurements as part of an ongoing noise study on the Sound Transit Link system. Tested vibration data to determine the best measurement and processing techniques to store the data in an online database for in-car measurements.

LA Metro CRRC Railcar Testing, Los Angeles, CA*
Led the effort to plan the measurements, determine measurement locations and finalize the test plan. Formulated a method to capture speed data directly from legacy train vehicles. Executed noise and vibration specification measurements for new rail cars delivered by CRRC.

City of Los Angeles, Pershing Square Station Rehabilitation Noise Monitoring, CA*
Built noise models, wrote a construction noise plan, and assisted in on-site construction noise issues as they arose for a renovation of the Pershing Square metro station in downtown Los

Angeles. Trained construction personnel in techniques for noise reduction and how to conduct noise monitoring measurements to meet project specifications.

City of Orange Metrolink Parking Garage Construction Monitoring, CA*
Wrote an adaptive management vibration monitoring plan, set up equipment to monitor live vibration levels, and generated weekly reports as part of an effort to build a new parking garage. Designed, planned, and completed measurements to predict and mitigate pile driving construction impacts at three historic building locations adjacent to the construction site. Coordinated with the client whenever an on-site problem arose.

LA Metro Westside Subway Construction, Los Angeles, CA*
Planned, organized, and processed noise measurements for the Purple Line extension construction. Implemented both long term microphones to measure noise levels and accelerometers to measure vibration levels in existing subway tunnels. Oversaw noise monitoring at sensitive construction sites for the project and worked with the contractor to find ways to reduce construction noise levels by approximately 10dB.

Montreal Réseau Express Métropolitain, Canada*
Conducted vibration propagation measurements used to create models to predict operational vibration levels for an under-construction transit line. Managed equipment, solved problems in the field, and wrote parts of the report summarizing the findings of the acoustic study.

NHCRP Barrier*
Took on-highway measurements and wrote, designed, developed, and tested MATLAB code to identify specific spectrograms to use for analyses for a project evaluating barrier reflected highway traffic noise differences in the presence of a single absorptive or reflective noise barrier.

Siemens Railcar Testing for Sound Transit, Seattle, WA*
Measured in-car noise and vibration for new rail cars delivered by Siemens. Developed new internal techniques for measurements based on the written specifications. Contributed to the team that helped identify issues that new cars had in meeting the Sound Transit specifications for noise and vibration. Participated in developing the test plan and specified then acquired new equipment for the measurement.

Toronto/Ontario Eglinton Crosstown Light Rail, Final Design, Canada*
Assisted in vibration propagation measurements, analysis, and recommendations for mitigation for a 12-mile light-rail line both on and under Eglinton Avenue. Set up and ran equipment for at-grade measurements with an impact hammer for underground measurements with an impact load cell that was used during pre-construction borehole drilling.