Memo

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Date: October 7, 2025

To: Wendy Lao, Associate Planner, City of Sunnyvale

From: Kirsten Burrowes, Pat Angell, Ascent

Subject: 845 Stewart Drive Development Project – Technical Report Peer Review

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Technical Report Peer Review

Ascent has provided the following comments through technical review of applicant-provided reports for the 845 Stewart Drive Development Project, which would involve demolition of an existing building and parking lot to construct 28 condominium-style residential townhouses.

AIR QUALITY TECHNICAL REPORT

Global: BAAQMD has rebranded to the Bay Area Air District or District. Please revise throughout.

- Page 2, Paragraph 1: Recommend the following or similar edit to clarify that Buildings 3 and 4 are 14,014 square feet (sf) each, and not a combined total of 14,014 sf.:

  > The proposed project involves the demolition of one office building totaling approximately 16,815 square feet and the associated parking lot totaling approximately 34,150 square feet. The proposed residential development would have a total square footage of approximately 54,849 square feet and would include four 3-story buildings. Building 1 would be 14,226 square feet (inclusive of garages). Building 2 would be 12,595 square feet. Buildings 3 and 4 would <u>each</u> be 14,014 square feet.

- Page 6: AQ Regulatory Framework should include discussion and current status of ACC II, ACF, and the Low NOx Omnibus Regulations which require a federal waiver under the Clean Air Act following the passage of federal Public Laws 119-15, 119-16, and 119-17. Also recommend discussion of EPA's multi-pollutant emissions standards for light– medium–, and heavy-duty vehicles

- Page 7, Paragraph 1: (1) See recommended text to revise wording to resolve grammatical error. (2) Recommend including the following text, or similar, to identify the connection between the AAQS, air district thresholds meant to attain the AAQS, and how these tie into protecting human health, as required for AQ analyses per *Sierra Club v. County of Fresno* :

  > The City of Sunnyvale has elected to utilize the significance criteria recommended by the BAAQMD ~~were used~~ to make CEQA significance determinations related to the proposed project's impacts on air quality. The BAAQMD has adopted standards of significance for construction and operation. Table 1 shows the thresholds of significance. In developing the thresholds of significance for air pollutants, the BAAQMD

considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts on the region's existing air quality conditions. CEQA thresholds of significance developed by air districts are tied to achieving or maintaining an attainment designation under the NAAQS and CAAQS, which are scientifically substantiated, numerical concentrations of criteria air pollutants considered to be protective or human health. Air districts use other federal guidance such as New Source Review to inform the development of thresholds. Air district–specific thresholds are typically numerical and apply to construction and operational emissions. Emissions shown to be above the thresholds would indicate that a project's discrete emission would result in a cumulative, regional contribution (i.e., significant) to the baseline attainment or nonattainment designation of an air basin. Air basins in nonattainment areas support ambient air conditions that, due to the exceedance of the NAAQS and CAAQS, could cause adverse health impacts to those residing in the basin.

- Page 9: Recommend removing policies EM-11.1, EM-11.5, EM-11.12 from the list of applicable Sunnyvale General Plan policies, as the project does not involve the following: regional air quality planning efforts, stationary sources of pollution, or retrofitting of existing buildings.
- Page 10, Paragraph 3: It may be helpful to clarify here that projections are from the regional MTP/SCS.
- Page 11, Paragraph 1: Assuming this measure of analysis is based on General Conformity? Should cite source backing up validity of this approach.
- Page 11, general note for discussion under Criterion 2: As mentioned above, it would be helpful to clarify that these growth assumptions are from the MTP/SCS. It would be helpful to give more of a sense of the way that the Clean Air Plan fits into the broader regional planning process
- Table 2 Notes:
  - Control Measure EN1 Project Consistency: Include mention of SB 1020 as well. While SB 100 established a new RPS target of 50 percent by 2026, increases the RPS target in 2030 from 50 to 60 percent, and establishes a goal of 100 percent zero-carbon energy sources by 2045, SB 1020 supersedes the goals of SB 100 by requiring that 90 percent of all retail sales of electricity to California end-use customers are procured from renewable energy and zero-carbon resources by December 31, 2035. The requirement increases to 95 percent by December 31, 2040, and to 100 percent by December 31, 2045. Under SB 1020, state agency facilities must use 100 percent renewable and zero-carbon energy resources by December 31, 2035.
  - Control Measure NW2 Project consistency: specifically include mention of how the trees/vegetation will contribute towards reducing the UHIE and carbon sequestration, since that is the main intent/objective of NW2.
- Page 15, Paragraph 1: "By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region."
  - Here it may be useful info to call out the exceptions (i.e., TACs, CO hotspots, and odors) and direct the reader to those impact discussions below for further details.
- Page 15/16, Paragraph 4: It would bolster the analysis' connection to human health impacts (Sierra Club v. Fresno County) to reiterate that a project that would not exceed BAAQMD thresholds would not have a significant impact related to human health, citing the discussion recommended for Page 7, paragraph 1 (see above comment) as to how BAAQMD's thresholds tie into the AAQS which are developed to be protective of human health.

- Page 16, Paragraph 1: Some examples of off-road equipment and on-road vehicles that would be expected to be used during construction may be helpful to give the reader a sense of what construction activities could look like. May also want to specifically differentiate "on-road construction trips" as being comprised of worker, vendor, and hauling trips.
- Page 17, Paragraph 1: "The calculations of pollutant emissions from the construction equipment account for the type of equipment, horsepower and load factors of the equipment, and the duration of equipment use."
  - Can we state that the values for these were defaults from the CalEEMod model?
- Page 18, general note for Impact AIR-2 discussion: Operational emissions analysis should disclose uncertainty of ACC II in regard to emissions estimates. This can be provided in the methodology section.
- Table 5: Suggest revising table to provide more clarity as to the units associated with the numbers in each cell.
- Page 19: Carbon monoxide impacts belong under Impact AIR-3, substantial pollutant concentrations.
- Page 23, Paragraph 1: Including the distance between the project site and the school may be useful information for the reader to get an idea of how its distance relates to the distances of the MEIR and MEIW.
- Page 30: "Construction project impacts were calculated at nearby sensitive receptors based on the concentrations estimated from construction emissions over 385 workdays or 1.5 years, assuming residential exposure starting at third trimester and until 1.25 years of age." Recommend adding a citation for residential exposure period assumptions.

Modeling

- Page 38, Table 5.6.1 "Construction Earthmoving Activities": Material Exported qty in table (410 cy) is less than the 417 cy of required soil export identified on Page 2, paragraph 1.

CULTURAL RESOURCES ASSESSMENT

- Page 2, Paragraph 3: "commercial building was subsequently recorded and evaluated for historic significance [...] in consideration of NRHP and CRHR designation" – Recommend updating language as building was not evaluation under NRHP. Either update and include an NRHP evaluation separate from the CRHR evaluation or just include the CRHR evaluation and change this language.
- Page 27, Paragraph 1: Not being evaluated under NRHP standards can exclude lettering Criteria A-D. Recommend looking through report to update language to show built environment resource was not evaluated under NRHP (ex. Pg 30, integrity paragraph).
- Page 31, Paragraph 5: Suggest including 845 Stewart Drive was evaluated under CRHR and Local landmark assessment and is recommended not eligible, thus it is not a resource under CEQA. As such no built environment resource will be impacted.
- Page 32: Paragraph 1: Recommend being consistent with age of resource and eligibility standards – "over 45 years" to over 50.
- Page 33: Point 2: Unclear. It may be helpful to clarify what will happen with the bullet points occurrences.
- Recommend updating the language of eligibility from 'determined' to 'recommended' not eligible throughout the report.
- Dana DePietro and Taylor Love are not qualified architectural historians, we suggest a qualified architectural historian review the report and add their name and qualifications to the report.
  - Also add DePietro qualifications as author of the DPR.

GEOTECHNICAL INVESTIGATION

- No comments on the content of the Geotechnical Investigation. Report is adequate for preparation of the CEQA analysis.
- General comment for city: would recommendations provided in the Geotechnical Investigation be incorporated as environmental protection measures in the CEQA document or be made conditions of approval?

PHASE I AND II ENVIRONMENTAL SITE ASSESSMENTS

Ascent reviewed both Phase I Environmental Site Assessment (ESA) (October 30, 2024) and the Phase II Subsurface Investigation (October 31, 2024) for 845 Stewart Drive prepared by Partner in regard to the adequacy of their evaluation of on-site contamination potential that could impact residential development of the site.

Below are the results of our review:

- The Phase 1 ESA was prepared consistent with the American Society for Testing and Materials[1] Practice E1527-21 (Standard Practice for Environmental Site Assessments). Practice E1527-21 identifies that Phase 1 ESAs are to contain the following information:
  - Property and adjoining site reconnaissance
  - Interviews of owners and key personnel.
  - Review of historic resources
  - Review of regulatory agency records and databases
- The Phase I ESA identifies limitations and exceptions of the report regarding information that was not available at the time of preparation.
- Incorporates the results of the Phase II Subsurface Investigation to further determine the extent of on-site recognized environmental conditions associated with groundwater and soil contamination from off-site uses (TRW Microwave Superfund site). This consisted of a series of soil and groundwater samples that determined soil gas from perchloroethylene (PCE) and trichloroethene (TCE) could expose future residents of the site to concentrations above regulatory standards and create a public health hazard.
- The conclusions of the document conclude that a vapor mitigation system and implementation of a soils management plan is needed for project design and construction. This is a common method of addressing exposure to soil gas from contamination. The July 25, 2025 project plan set includes a note that a vapor barrier and passive venting as part of the foundation would be provided as identified in the geotechnical study..

Thus, the Phase I ESA and the Phase II Subsurface Investigation for 845 Stewart Drive appear to adequately address the contamination issue for the site to support the CEQA determinations for the project. Further clarification on the vapor barrier, venting, and soil management plan would further assist the processing of this application but could be addressed through project conditioning depending on how the City has addressed this issue on other projects.

General comment: please clarify that VIMS or other mitigation systems would support residential development, such as by reducing RECs in exceedance of residential ESLs.

[1] ASTM is a standards organization that develops and publishes voluntary consensus technical international standards for a wide range of materials, products, systems, and services.

NOISE IMPACT ANALYSIS MEMORANDUM

- Page 10, Table 3: Suggest revising table to include the duration of each short-term noise measurement and define each noise levels as A-Weighted.
- Page 11, "During daytime hours, a significant temporary increase would be an increase in excess of the average daily noise levels of 80 dBA Leq(8-hour) as measured at a receiving residential land use and 85 dBA Leq(8-hour) as measured at a receiving commercial land use." Noise standards provided seems to be derived from FTA's "Detailed Construction Noise Analysis" Methodology. If so, construction noise analysis would need to include the FTA's Day-Night Average of 75 dBA L_{dn} as a significant threshold.
- Page 12, Second Paragraph: please provide citations for construction equipment reference noise levels and equipment assumed in model.
- Page 12, Third Paragraph: It is unclear how the reference noise level of 90 dBA L_{max} at 50 feet was calculated, as Appendix B has no reference to that noise level. Suggest revising text to reference the 86 dBA L_{max} at 50 feet, with text explaining the effects of ground attenuation. In addition, the methodology suggests that construction noise levels are measured from the acoustical center of the construction site to the nearest sensitive commercial receptor (i.e. 45 feet). However, according to Appendix B, the $L_{eq, 8hr}$ calculations assume the acoustical center moves 50 feet away from sensitive receptors every hour. Please verify if this level of detail is provided in the construction plans.
    - Page 12, "The façade of this building would be located approximately 45 feet from the acoustic center of construction activity where multiple pieces of heavy construction equipment would potentially operate simultaneously at the project site." Appendix B noise calculations suggest that only one piece of heavy construction equipment would operate at 45 feet from the nearest sensitive receptor, while others would operate at 90 feet from the nearest sensitive receptor. Please confirm which distances are correct.
- Page 13, 1st Paragraph: The methodology suggests that construction noise levels are measured from the acoustical center of the construction site to the nearest sensitive residential sensitive receptor (i.e. 350 feet). However, according to Appendix B, the $L_{eq, 8hr}$ calculations assume the acoustical center moves 50 feet away from sensitive receptors every hour. Please verify if this level of detail is provided in the construction plans.
- Page 14, sixth paragraph: Analysis states HVAC equipment would suggest residential grade equipment on commercial sensitive receptors; however, Appendix B shows commercial grade equipment on commercial sensitive receptors. Please verify that residential grade mechanical equipment is used for the analysis.
- Attachment B, Mechanical Equipment Noise Calcs: Provide reasoning/documentation supporting the use of a 80% usage rate. Residential mechanical equipment could potentially operate 24 hours depending on occupants.