

CHAPTER 4

Environmental Setting, Impacts, and Mitigation Measures

Introduction to the Environmental Analysis

Organized by environmental resource area (also referred to as environmental “topics” or environmental “factors”), this chapter provides an integrated discussion of the environmental setting (including the regional, local and/or Project setting and regulatory setting) and environmental consequences (impacts), associated with the construction, operation, and maintenance of the Project, and mitigation measures for potentially significant impacts.

This introduction to the analysis presents an overview of the scope and organization of the analysis sections, the methods for determining what impacts are significant, and the nomenclature for impacts and mitigation measures used throughout the document.

4.0.1 CEQA Requirements

The California Environmental Quality Act (CEQA) *Statutes* and the CEQA *Guidelines* require that the environmental analysis for an Environmental Impact Report (EIR) must evaluate impacts associated with a project and identify mitigation measures for any potentially significant impacts. All phases of a project are evaluated in the analysis. The CEQA *Guidelines* state:

- An EIR shall identify and focus on the significant environmental effects of the project. In assessing the impact of a project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the Notice of Preparation (NOP) is published, or where no NOP is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected (CEQA *Guidelines* Section 15126.2[a]).
- An EIR must discuss any inconsistencies between the project and applicable general plans and regional plans, including, without limitation, the applicable air quality attainment or maintenance plan or State Implementation Plan, area-wide waste treatment and water quality

control plans, regional transportation plans, regional housing allocation plans, habitat conservation plans, natural community conservation plans and regional land use plans (CEQA *Guidelines* Section 15125[d]).

- An EIR must describe feasible measures that could minimize significant adverse impacts; such measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. Mitigation measures are not required for effects that are found to be less than significant (CEQA *Guidelines* Section 15126.4[a]).

4.0.2 Project Baseline

The environmental baseline identifies the existing physical conditions on, around, and affecting the Project site. The baseline is established to provide a point of comparison between pre-Project conditions (the baseline) and post-Project conditions to determine whether the change to the existing environment caused by the Project is significant under CEQA. For most topics or resource areas (such as hazards and hazardous materials; utilities and service systems; noise; and other aspects of the physical environment), the baseline is the same as the “environmental setting,” *i.e.*, the physical environmental conditions in the vicinity of the Project as they existed in the spring of 2017¹ when the City published the NOP for the Project (CEQA *Guidelines* Sections 15125[a], 15126.2[a]). Because no uses currently operate at the site, the air quality and greenhouse gas baseline emissions at the Project site are assumed to be zero. Similarly, no vehicle trips are currently generated from the Project site. For traffic, potential Project impacts are evaluated in the context of scenarios referred to as “Existing Conditions” (existing conditions with volumes obtained from recent traffic counts and the existing roadway system), as well as future “Cumulative (2040) Conditions” (future conditions with planned population and employment growth, and planned transportation system improvements, for the year 2040). Traffic volume forecasts were developed using the Contra Costa Transportation Authority [CCTA] Countywide Travel Demand Model.

4.0.3 Environmental Impacts

This EIR addresses impacts of the Project on the existing environment pursuant to CEQA. As discussed in Chapter 1, *Introduction*, of this EIR, potential effects of the environment on a project may not be legally required to be analyzed or mitigated under CEQA, although the CEQA *Guidelines* include certain significance criteria that pertain to the effect of the environment on a project. A growing number of court cases have supported the position that CEQA is solely, or largely, concerned with the effects of a project on the environment and not the effects of the environment on a project; that latter may include thresholds related to air quality (e.g., locating a new residential project near an existing source of air pollution), geology (e.g., locating a new structure in a seismic hazard zone), and noise (e.g., locating a new residential project on a loud street).

¹ The City issued the NOP for the EIR on June 7, 2017.

Most recently, the California Supreme Court’s *CBIA v. BAAQMD* decision² has indicated that the impact of existing environmental conditions on a project’s future users or residents are generally not required to be considered in a CEQA evaluation, except when the project may exacerbate existing hazards or existing conditions.

Consistent with previous County practice and CEQA guidance, this EIR continues to address impacts of the environment on the Project caused by the existing environment with respect to air quality, geology and soils, climate change and greenhouse gases, hazards and hazardous materials, and noise. These impacts are also addressed to provide information to the public and decision-makers of the Project.

COVID-19

Since publication of the NOP, the COVID-19 pandemic has introduced a substantial amount of uncertainty to human lives. The pandemic has directly affected human behavior, requiring people to shelter in place, implement social distancing, and make other changes to the manner in which they live. Indirectly, COVID-19 has affected the economy by resulting in reduced consumer spending, business closures, and widespread unemployment. Some of these trends are considered short-term and are expected to reverse; however, there likely will be more permanent changes in the ways people live and behave in the post-pandemic world. Some EIR sections note the recent changes to behavior and the economy resulting from COVID-19 for informational purposes; however, the EIR analysis is based on an environmental baseline without COVID-19, and it would be speculative to identify long-term consequences of the pandemic at this time.

4.0.4 Mitigation Measures

Project-specific mitigation measures are identified throughout this EIR where feasible and necessary to avoid, minimize, rectify, reduce, or compensate for potential significant, adverse impacts of the Project in accordance with CEQA *Guidelines* Section 15126.4. All mitigation measures will be 1) included as part of the design, construction, and operations of the proposed Project; 2) adopted as conditions of approval for the proposed Project; and 3) subject to monitoring and reporting requirements of CEQA and the terms of the discretionary approvals for the Project.

4.0.5 Section Contents and Definition of Terms

Section Contents

Sections 4.1 through 4.13 follow this format:

- **Environmental Setting:** Provides an overview of the physical environmental conditions in the area at the time of, or prior to, the publication of the NOP, that could be affected by implementation of the Project in accordance with State CEQA *Guidelines* Section 15125.

² *California Building Industry Association v. Bay Area Air Quality Management District*, 218 Cal.App.4th 1171 (2015). In the decision, the Court held that “agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project’s future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project’s impact on the environment – and not the environment’s impact on the project – that compels an evaluation of how future residents or users could be affected by exacerbated conditions.”

- **Regulatory Setting:** Identifies the laws, regulations, ordinances, plans, and policies that are relevant to each resource area.
- **Significance Criteria:** Provides the criteria used in this document to define the level at which an impact would be considered significant. This EIR applies the significance criteria identified in the provisions in the CEQA *Guidelines* for determining the significance of environmental effects, including CEQA *Guidelines* Sections 15064, 15064.5, 15065, 15382, and Appendix G.³ This section also discusses, where applicable, the *Approach to Analysis* (i.e., analytical methodology), and, where applicable, a summary of *Topics with No Impact or Otherwise Not Addressed in this EIR*.
- **Impact Analysis:** Presents the potential resulting impacts and, where applicable, feasible mitigation measures. The cumulative analysis follows the Project-level analysis in each section.

Impacts. The impacts analysis addresses all parts of the Project action: construction and operations, and secondary impacts resulting from the implementation of mitigation measures, where applicable.

Each section lists impacts numerically and sequentially. An impact statement (always in bold text) precedes the discussion of each impact analysis and summarizes the potential for the Project to have an impact. Impact statements use an abbreviated designation that corresponds to the environmental topic (e.g., “AES” for aesthetic impacts). A number follows the designation to indicate the order in which that impact is identified within that particular analysis. For example, “Impact CUL-3” is the third cultural resources impact identified in the cultural resources analysis.

The impact statement culminates with the level of impact that exists *prior* to the consideration of mitigation measures, if any are required. An impact determination following the initial analysis (prior to considering mitigation measures) is categorized as one of the following:

- **No Impact (N):** The Project would not cause a noticeable effect on the environment as measured by the applicable significance criterion and threshold; therefore, no mitigation would be required.
- **Less than Significant, No Mitigation Required (LTS):** The impact of the Project does not reach or exceed the defined threshold of significance. The impact would not cause a substantial adverse change in the environment as measured by the applicable significance criterion and threshold; therefore, no mitigation would be required.
- **Potentially Significant prior to Mitigation (PS):** The Project would cause a substantial adverse change in the physical conditions of the environment; one or more feasible mitigation measures would reduce the impact to a less-than-significant level.

Mitigation Measures. Mitigation measures are designated in the same manner described above for impact statements, and each mitigation measure is numbered sequentially. Generally, all mitigation measures are indented, and titles are in bold text.

³ Although no Environmental Review Checklist was prepared for this EIR, the factors listed for consideration in the Environmental Review Checklist are evaluated in this EIR.

The impact determination after the incorporation of feasible mitigation measures for a particular impact is stated at the close of the impact analysis discussion and presentation of mitigation measures and is either:

- ***Less than Significant (LTS or LTSM)***: The impact is less-than-significant, either because no mitigation measure was required (LS), or because feasible mitigation measures were identified for implementation and would fully reduce the impact to a less-than-significant level (LTSM).
- ***Significant and Unavoidable (SU)***: No feasible mitigation measures were identified to reduce the Potentially Significant impact to a less-than-significant level or the implementation of which was fully within the control of the Lead Agency.

4.0.6 Cumulative Analysis

Approach

CEQA defines cumulative as “two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impacts.” Section 15130 of the *CEQA Guidelines* requires that an EIR evaluate potential environmental impacts when the project’s incremental effect is cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past, present, existing, approved, pending and reasonably foreseeable future projects. These impacts can result from a combination of a proposed project together with other projects causing related impacts.

CEQA Guidelines Section 15130(b)(1) identifies two approaches to cumulative impacts analysis. Specifically, cumulative impacts analysis can be based on: (1) a list of past, present, and probable future projects producing related impacts that could combine with those of a proposed project; or (2) a summary of projections contained in a general plan or related planning document. As described below, this EIR primarily uses the projections approach, as appropriate for each impact area, and then lists specific projects in proximity to the Project site.

The effects of existing development, including past projects, is considered for each environmental topic discussed in this chapter, as part of baseline conditions.

Potential cumulative impacts are discussed throughout each environmental topic section in this Chapter 4 as necessary.

Cumulative Context

The context used for assessing cumulative impacts typically varies depending on the specific topic being analyzed to reflect the different geographic scope of different impact areas. For example, considerations for the cumulative air quality analysis are different from those used for the cumulative analysis of aesthetics. In assessing aesthetic impacts, only development within the vicinity of the Project site could contribute to a cumulative visual effect. In assessing air quality impacts, on the other hand, all development within the air basin contributes to regional emissions of criteria pollutants, and basin-wide projections of emissions comprise the best tool for determining the cumulative effect. Accordingly, the geographic setting and other parameters of each cumulative analysis discussion can vary.

For the purposes of this EIR analysis, the cumulative context area is generally defined as the City of Martinez and its SOI, which includes the Vine Hill/Pacheco Boulevard area, which generally extends east to the main channel of Pacheco Creek, north to Waterfront Road, west to Shell Avenue and Pacheco Boulevard, and south to Highway 4.

Cumulative Land Use and Infrastructure Assumptions

Information used to determine cumulative growth assumptions for employment and housing is obtained from *Plan Bay Area 2040*, the County's General Plan, and information regarding projects in the vicinity of the proposed Project site that are under construction, approved, and/or pending, based on information provided by the County's Department of Conservation and Development and the County's list of all development projects under review as of the third quarter 2020 (listed below). For the analyses of traffic, air quality, greenhouse gases (GHGs), and noise impacts, cumulative scenario projections were developed using Plan Bay Area projections per the Contra Costa County Transportation Authority (CCTA) Countywide Travel Demand Model.

Cumulative Projects in the Vicinity of the Project Site

County staff identified "approved, but not yet completed" projects within the vicinity of the Project site area in **Table 4.0-1**. Most of the projects identified for the cumulative scenario "list" would introduce new residential uses to the Project vicinity. Future new development within the area would be subject to development guidance contained within the General Plan.

Table 4.0-1 does not include all projects that would contribute to the cumulative setting along with the proposed Project; rather, it includes a number of larger cumulative projects to demonstrate the scope and nature of development in the cumulative context for the Project. Some of the projects listed in Table 4.0-1 may not have been known or foreseeable at the time necessary to have been incorporated into *Plan Bay Area 2040* and the CCTA Countywide Travel Demand Model.

**TABLE 4.0-1
CUMULATIVE PROJECTS NEAR THE PROJECT SITE**

Project Name	Project Description	Location / Relation to Project Site	Environmental Review / Construction Schedule
Approved Projects/No Construction Started			
Palms Ten	10-lot residential subdivision	Palms Drive Adjacent to Project site's northwestern boundary.	Approved. 10 Lots recorded. Construction timing not known.
Lower Walnut Creek Restoration Project	Contra Costa Flood Control District's proposal to restore and enhance coastal wetlands, adjacent habitat, diversity, and connectivity along four miles of creek channel, over approximately 386 acres in total.	Southern shoreline of Suisun Bay and from the mouth of Walnut Creek at Suisun Bay upstream along Walnut Creek and Pacheco Creek. Approximately 0.5 miles east of Project site	Approved. Construction anticipated 2021 through 2022 (or 2022 through 2023 at the latest).
FILE #SD17-9459 & LP14-2046	Tentative map to subdivide a 66.57-acre portion (APN 159-250-018, -019) of the 95-acre project site into six individual industrial lots. Land use permit to allow: (1) the establishment of up to five contractor's yard uses, 1 immediate and 4 future; (2) roadway and utility improvements impacting three additional parcels (APN 159-250-020, -021, -022); and (3) importation of up to approx. 155,576 cubic yards of fill material (some of which is composed of lightweight confoam material).	Western boundary of Walnut Creek, approximately 0.74 miles south of the Waterfront Road bridge crossing over Walnut Creek. Approximately 0.1 miles east of Project site	Approved. Construction anticipated Construction timing not known.
Weatherly Place	8-lot residential subdivision	4776 Pacheco Boulevard Approximately 0.75 miles southwest of Project site	Approved. Construction timing not known.
Approved Projects Under Construction:			
Blum View Estates	28-lot residential subdivision	Blum Road Approximately 0.2 mile southeast of Project site.	Approved. Partially constructed: 9 Lots recorded, Lots 1-8 developed.
Hillside Estates	11-lot residential subdivision	150 Hillside Lane Approximately 0.4 mile southeast of Project site.	Approved. Partially constructed: Phase 1, Lot 1 developed. Phase 2, Lots 2-11 not recorded or developed.
Approved and Constructed			
Bella Rosa	128-lot residential subdivision	Pacheco Boulevard Approximately 0.3 miles southwest of Project site	Constructed
Field Courtyard	89-lot residential subdivision	Pacheco Boulevard Approximately 0.3 miles south of Project site	Constructed
4762 Pacheco Boulevard	20-lot residential subdivision	4762 Pacheco Boulevard Approximately 0.4 miles south of Project site	Constructed

TABLE 4.0-1 (CONTINUED)
CUMULATIVE PROJECTS NEAR THE PROJECT SITE

Project Name	Project Description	Location / Relation to Project Site	Environmental Review / Construction Schedule
Projects Under Review:			
File # LP20-2013	Land use permit application to establish a cannabis delivery business and call center within an existing tenant space	111 Center Avenue Approximately 2 miles south of Project site.	Environmental review underway.
SD18-9500	6-lot residential subdivision	4500 Blum Road, Martinez Approximately 0.3 miles southeast of Project site	Environmental review underway.
Pacheco Boulevard Improvements - Blum Road to Morello Avenue	Contra Costa County and the City of Martinez are evaluating alternatives to improve Pacheco Boulevard between Blum Road and Morello Avenue (Contra Costa County, 2017). The project will consider widening of the roadway, intersection configuration, continuous sidewalks, the addition of bike lanes, and coordination with transit companies.	Along Pacheco Boulevard from Blum Road to Morello Avenue, within unincorporated Contra Costa County and the City of Martinez. Approximately 1,300 feet west of the Project site.	Environmental review underway.
Project Review Inactive			
Seal Island	24-lot residential subdivision	Central Avenue Adjacent to Project site's northeastern boundary.	Inactive