

CHAPTER 5

Alternatives

The California Environmental Quality Act (CEQA) requires that the EIR compare the effects of a “reasonable range of alternatives” to the effects of the project. The alternatives selected for comparison are normally those that would avoid or substantially lessen one or more significant effects of the project while still attaining most of the basic objectives of the project (CEQA *Guidelines* Section 15126.6). Specifically, Section 15126.6(b) of the CEQA *Guidelines*, states “the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.” The “range of alternatives” is governed by the “rule of reason” which requires the EIR to set forth only those alternatives necessary to permit an informed and reasoned choice by the decision-making body and informed public participation [CEQA *Guidelines* Section 15126.6(f)]. CEQA generally defines “feasible” to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors.

5.1 Factors in the Selection of Alternatives

The CEQA *Guidelines* recommend that an EIR should briefly describe the rationale for selecting the alternatives to be discussed, identify any alternatives that were considered by the lead agency but were rejected as infeasible, and briefly explain the reasons underlying the lead agency’s determination [CEQA *Guidelines*, Section 15126.6(c)]. The following factors were considered in identifying a reasonable range of alternatives to the project:

- The extent to which the alternative would avoid or lessen one or more of the identified significant environmental effects of the project;
- The potential feasibility of the alternative, taking into account site suitability, economic viability, availability of infrastructure;
- Consistency with the *Contra Costa General Plan* (General Plan) and other regulatory considerations;
- The extent to which the alternative would accomplish most of the basic goals and objectives of the project;
- The requirement of the CEQA *Guidelines* to consider a “no-project” alternative and to identify an “environmentally superior” alternative in addition to the no-project alternative [CEQA *Guidelines*, Section 15126.6(e)].

The analysis foremost seeks to reduce or avoid the **significant and unavoidable impacts** identified with the proposed Project.

- Total home based vehicle miles traveled (VMT) compared to the regional VMT for similar use (project Impact TRF-3 and cumulative Impact TRF-8) (SU)

Secondarily, the alternatives are formulated to reduce or avoid other relevant **potentially significant impacts that are reduced to less than significant** with the implementation of mitigation measures identified for the Project:

- Emissions of criteria pollutants and toxic air contaminants (TACs) to existing and proposed residents (Impact AIR-2 and Impact AIR-3) (LTSM)
- Greenhouse Gas Emissions (Impact GHG-1) (LTSM)
- Degradation of the visual quality during construction (Impact AES-1) (LTSM)
- Slope stability and landslide hazards (Impact GEO-1) (LTSM)
- Public service demand for fire and emergency medical service (Impact PUB-1) (LTSM)
- Land use compatibility and protection of open hillsides and ridgelines (Impact LU-2) (LTS)

These environmental effects alternative are discussed for each alternative (in comparison to the Project) in Section 5.4 below. The relative effects of each alternative and the proposed Project for all of the environmental topics analyzed in this Draft EIR are summarized in **Table 5-2** at the end of this chapter.

5.2 Alternatives Selected for Consideration

With consideration given to the above factors for selection, the County identified the following reasonable range of project alternatives to be addressed in this EIR:

- **Alternative 1:** No Project / Existing Conditions (No Change)
- **Alternative 2:** Reduced Grading / 50 percent Development (72 units)
- **Alternative 3:** Reduced Grading / Light Industrial

5.3 Description and Analysis of Alternatives

Throughout this section, a description of each alternative is followed by a discussion of its impacts and how it differs from those of the project. As permitted by CEQA, the significant effects of the alternatives are discussed in less detail than are the effects of the project [CEQA *Guidelines* Section 15126.6(d)]. However, the analysis is conducted at a sufficient level of detail to provide County decision-makers adequate information to fully evaluate the alternatives and to approve any of the alternatives without further environmental review.

The impacts associated with the Project and each alternative are stated as levels of significance *after* implementation of mitigation measures identified in Chapter 4 (except where necessary for

clarity). **Appendix F** includes supporting detail for vehicle trip generation, GHG emissions and, where quantified, VMT.

Alternative 1: No Project / Existing Conditions

Under the No Project Alternative, the proposed Project would not be constructed, and the 78.3-acre property would remain in its existing condition: mostly open and undeveloped land. The No Project Alternative would keep the Project site under its current General Plan land use designation of “Heavy Industry” and zoning classification of “Heavy Industrial”. No subdivision of the property would occur and no additional infrastructure would be developed.

Comparative Impacts

Compared to the Project, the No Project Alternative would not create the impacts described in the Project analysis in Chapter 4 of this Draft EIR. Conditions would remain as described in the setting sections of the impact analysis. The No Project Alternative would eliminate all Project-related impacts.

The No Project Alternative would not meet the Project’s basic objective to development new residential use in the County.

The No Project Alternative would not preclude future development of the site with use(s) consistent with the General Plan designation and zoning. A potential scenario is evaluated in Alternative 3.

Alternative 2: Reduced Grading / 50 percent Development (72 units)

The Reduced Grading / 50 percent Development Alternative (“Alternative 2”) is a variation of the Project included in the EIR to allow consideration of a reduced impact scenario that would develop the land for less intense use. In this scenario, the proposed number of housing units would be reduced by approximately 50 percent to yield a total of 72 new single-family units on the project site. Consistent with the reduced area and extent of grading, the distribution of the 72 residential lots would be reconfigured within the project site. The developable area, proposed to be approximately 30.4 acres with the Project, would also be reduced by more than 50 percent. Lot sizes would be smaller and higher density clustering of the single-family homes would occur toward the lower elevations. No Oak Trees would be removed, under this alternative.

Like the proposed Project, Alternative 2 would maintain two points of entry to the project site, one on Palms Drive and one on Central Avenue, and would also provide parks and open space on portions of the project site, including the proposed private neighborhood park. Alternative 2 would meet most of the Project objectives, although the number of homes developed would be half that of the Project.

Comparative Impacts

Vehicle Miles Traveled

Alternative 2 would result in the same significant and unavoidable VMT impacts (project Impacts TRF-3 and cumulative Impact C-TRF-8) identified with the Project, since it would maintain the same home-based VMT ratio as the Project (20.6 per resident), which exceeds the applicable threshold (see Appendix F). Also, even though total VMT for Alternative 2 would be half of that identified for the Project, it would continue to exceed VMT under existing site conditions (heavy industrial General Plan land use designation). Overall, the impacts would remain the same as identified with the Project, although overall VMT would be reduced, since Alternative 2 entails less development.

Air Quality/Health Risk

Alternative 2 would generate nearly 50 percent of the peak hour and daily vehicle trips generated by the Project. As a result, the Alternative 2 would substantially reduce the severity of the less-than-significant criteria pollutant emissions from mobile sources in particular – the largest contributor of emissions - compared to those identified with the Project. Construction emissions would also be reduced since approximately half of the site would be developed under Alternative 2. However, the same construction impact and mitigation to ensure standard best management practices (BMPs) still would apply (Impact AIR-1 and Mitigation Measure AIR-1 [Best Management Practices for Controlling Particulate Emission]) to Alternative 2.

Further, the reduced construction period could reduce the exposure of TACs affecting health risk effects to nearby sensitive receptors (Impact AIR-3 and Mitigation Measure AIR-2 [Enhanced Exhaust Emissions Reduction Measures]), however this assessment does not assume that the distance of construction activities to those receptors would be substantially reduced compared to the proposed Project and to be below the significance threshold. Therefore, the impact identified with the Project would still occur with Alternative 2, and the mitigation measure would still reduce the impact to less than significant.

GHG Emissions

With substantially reduced vehicle trips, construction activity and duration, and total housing units, Alternative 2 would also generate substantially fewer GHG emissions from mobile and other sources compared to the proposed Project. As a result, the total annual GHG emissions from Alternative 2 would be 778 MT CO₂e/yr (compared to 1,556 MT CO₂e/yr of the Project), and therefore would not exceed the applicable significance threshold (see Appendix G). Therefore, the impact and mitigation measure identified for the Project (Impact GHG-1, Impact GHG-2 and Mitigation Measure GHG-1) would not apply to Alternative 2. The impact would be less than significant compared to potentially significant, before mitigation, identified for the Project.

Visual Quality During Construction

The Project requires mitigation measures to reduce the temporary aesthetics nuisances during construction to less than significant (Impact and Mitigation Measure AES-1

[Construction/Staging Screening]), and while the extent and duration of construction activities for the reduced development in Alternative 2 would be substantially less than required with the Project, this analysis maintains that the mitigation should also apply to Alternative 2, although the overall effect may be less severe.

Slope Stability and Landslide Hazards

Since development would be focused on the lower areas of the site, the resulting grading plan would reduce alterations to the natural slope and overall topography of the site. Specifically, Alternative 2 would avoid the need for drainage terraces on the high cut slopes. The less-than-significant effects regarding slope instability and landside hazards, including risks directly caused by land alteration (Impact GEO-1) would be less severe with Alternative 2 than the proposed Project, but would remain less than significant with the implementation of mitigation (Mitigation Measure GEO-1 [Geotechnical Report Compliance]).

Public Fire and Emergency Medical Service Demands

Alternative 2 would introduce less of the same land use to the Project site, which would result in less development and lower service demands than the Project. Reduced by one-half, Alternative two would generate fewer new residents and consequently less demand for public services and utilities. Alternative 2 would maintain the potentially significant impact resulting from the demand for fire protection and emergency medical services (Impact PUB-1) and would continue to implement measures to reduce this demand (Mitigation Measure PUB-1), reducing the impact to less than significant, same as for the proposed Project.

Land Use Compatibility and Policies

Alternative 2 would continue to locate new residential uses on the property and therefore would require the County to approve a zoning reclassification and amend the General Plan land use designation from Heavy Industrial (“H-I” and “HI”) to Single Family Residential-High Density (“SH”) to accommodate the proposed uses. However, like the proposed Project, assuming the County approves the General Plan amendment, a consistency finding for the proposal could be achieved and Alternative 2 would maintain the same less-than-significant impact as the Project, since the same new residential use is proposed (Impact LUP-2).

Also, Alternative 2 would be fundamentally consistent with the intent of the *General Plan* policies that encourage preservation of the natural topography of existing hillsides and ridgelines and associated visual assets and policies that discourage extensive grading. The effects of land use compatibility would be similar to those of the proposed Project; Alternative 2 would not expand existing industrial uses and therefore would not disrupt any existing buffer protecting the existing residential neighborhood from these uses. The relative consistency with General Plan Policy 3-105 (regarding the preservation of slopes of Vine Hill Ridge and protecting area for open space use), and the reduced grading of the Project site, would better align with General Plan Policy 3-106 (buffering residential neighborhood east of I-680 from industrial / landfill-related uses). The impact would still be less than significant with no mitigation required, like the proposed Project.

Summary

Overall, Alternative 2 would not result in any new impacts not identified with the Project and would **avoid the potentially significant GHG emissions impacts (Impacts GHG-1 and GHG-2) identified with the Project** and that would be reduced to less than significant with mitigation (Mitigation Measure GHG-1). The significant and unavoidable VMT impacts (Impacts TRF-3 and C-TRF-8) identified with the Project would still occur since the ratio per household would not change and continue to exceed the applicable threshold (project). Also, even though total VMT would be substantially less than with the Project, it would continue to exceed VMT from the Project site under existing site conditions (heavy industrial General Plan land use designation). All other impact determinations with Alternative 2 would remain the same as identified for the proposed Project, although the effects may be reduced.

Alternative 3: Reduced Grading / Light Industrial

The Reduced Grading / Light Industrial Alternative (“Alternative 3”) would develop light industrial uses, rather than residential and open space uses. For purposes of this comparison analysis, it is assumed that Alternative 3 would develop relatively low intensity uses consistent with those in the vicinity of the Project site, such as self storage, recreational vehicle storage, etc., and that Central Avenue would serve as the only access point to the site.

This alternative would be similar to Alternative 2 in that it would reduce the extent of topographic changes to the site and the developable area, proposed to be approximately 30.4 acres with the Project, would also be reduced by more than 50 percent. Also, no Oak Trees would be removed, under this alternative. Access and development of the light industrial use storage use would be clustered in the lower elevation of the property, such that the overall development would generally conform to the natural contours of the site as feasible.

Comparative Impacts

Vehicle Miles Traveled

Alternative 3 involves a wholly different land use than the Proposed Project (and Alternative 2). Approximately three employees would be on-site during business hours of the self storage use. Moreover, this assessment assumes that these employees would reside in the Project area, and therefore the total VMT per weekday to the jobsite (or by users who would also likely reside nearby) would be relatively low. Also, a VMT-based employment that would factor in similar low-industrial/storage type uses nearby could result in a project-level VMT *per employee* (Impact TRF-3) that is comparable to the home-based VMT per resident of the proposed Project. Conservatively, the impact is assumed to remain SU for Alternative 3.

However, in the cumulative condition (Impact C-TRF-8), it is reasonable to project that the light industrial self storage use with Alternative 3 would add much less VMT per day than a heavy industrial use (e.g., the existing General Plan land use designation) or the proposed Project (or Alternative 2). Therefore, this may be less impactful than that under the Project (and Alternative 2).

Therefore, overall, this assessment assumes that Alternative 3 would have the same significant and unavoidable project VMT impact (Impact TRF-3) identified with the Project, and may avoid the significant and unavoidable contribution to the cumulative VMT impact (Impact C-TRF-8).

Air Quality/Health Risk

Alternative 3 would generate fewer peak hour and daily vehicle trips compared to that generated with the proposed Project. When compared to the Project, Alternative 3 would generate approximately 55 percent of the daily trips, approximately 65 percent of the a.m. peak hour trips and approximately 59 percent of the p.m. peak hour trips (see Appendix F containing comparative trip generation detail). Like Alternative 2, because it would have substantially fewer vehicle trips (peak hour and daily) compared to those from the Project, Alternative 3 would substantially reduce criteria pollutant emissions, from mobile sources in particular, compared to those with the Project.

Construction emissions would also be reduced since substantially less of the site would be developed and construction activity would likely be shorter to construct the self-storage facility. However, the same construction impact and mitigation would be implemented to ensure standard best management practices (BMPs) still would apply (Impact AIR-1 and Mitigation Measure AIR-1 [Best Management Practices for Controlling Particulate Emission]) to Alternative 3. The reduced construction period could also thereby reduce the emissions of TACs affecting health risk effects to nearby sensitive receptors (Impact AIR-3 and Mitigation Measure AIR-2 [Enhanced Exhaust Emissions Reduction Measures]), however this assessment does not assume that the distance of construction activities to those receptors would be substantially less than with proposed Project, to an extent that the exposure would not exceed the significance threshold. Therefore, the impact identified with the Project would still occur under Alternative 3, and the mitigation measure would reduce the impact to less than significant.

GHG Emissions

With substantially reduced vehicle trips (see *Air Quality/Health Risk* above), construction activity and duration, and differing operational characteristics (low-density self storage compared to single family residential), Alternative 3 would also generate substantially fewer GHG emissions from all sources compared to the proposed Project. The annual GHG emissions from Alternative 3 would be less than the proposed Project (and presumably less than Alternative 2 discussed above). However, since the service population (new employees, which is assumed to be no more than approximately three workers on-site during business hours) would be substantially less than the Project (and Alternative 2), it is reasonable to project that Alternative 3 may have higher GHG emissions per service ratio. Therefore, this assessment assumes that Impact GHG-1 and Impact GHG-2 would continue to apply to Alternative 3. While there is a low potential that feasible mitigation could be identified to effectively reduce total emissions or emissions per service population. However, this assessment considers that Alternative 3 would result in the same potentially significant, but reduced to less-than-significant impact identified with the Project.

Visual Quality During Construction

The Project requires a mitigation measure to reduce the temporary aesthetics nuisances during construction to less than significant (Impact and Mitigation Measure AES-1 [Construction/Staging Screening]), and while the extent and duration of construction activities for a types of light industrial storage uses envisioned with Alternative 3 would be substantially less than required with the Project, this analysis maintains that the impact and mitigation would also apply, although the overall degree of the impact likely would be less severe.

Slope Stability and Landslide Hazards

As with Alternative 2, Since development would be focused on the lower areas of the site, the resulting grading plan would reduce alterations to the natural slope and overall topography of the site. Alternative 1 would avoid the need for drainage terraces on the high cut slopes. The less-than-significant effects regarding slope instability and landside hazards, including risks directly caused by land alteration (Impact GEO-1) would be less severe with the Project. This is both because of the limited alterations as well as the reduced risk to non-residential development. The impact would remain less than significant with the implementation of mitigation (Mitigation Measure GEO-1 [Geotechnical Report Compliance]).

Public Fire and Emergency Medical Service Demands

Alternative 3 would introduce a new light industrial storage use to the property. The activity onsite would have lower public service demands than the Project's proposed residential use, particularly for fire protection and emergency medical services (Impact PUB-1). Mitigation Measure PUB-1 [Fire Suppression] would not be required for Alternative 3, which would trigger existing code and regulatory requirements for fire suppression. Sprinklers. Therefore, due solely to the change in land use, the less-than-significant impact would not occur with Alternative 3. This alternative would not result in new or substantially more public service or recreation demands than the proposed Project.

Land Use Compatibility and Policies

Alternative 3 would not locate new residential uses near existing industrial uses and therefore would not introduce land uses to the property that potentially would be incompatible with the surrounding industrial uses. Alternative 3 would not require a zoning reclassification or a change to the current General Plan land use designation, since light industrial uses are permitted within the H-I and HI destinations (Heavy Industrial), respectively, on the site. Light industrial storage uses would buffer residential neighborhoods from existing industrial / landfill-related uses to the west of the property, as directed in General Plan Policy 3-106, and the reduced grading on the site would better align General Plan Policy 3-105. While neither Alternative 3 nor the Project would have a significant impact regarding land use compatibility and consistency with General Plan policies, Alternative 3 would be more consistent with certain policies and would not require changes to either zoning or the General Plan. The Alternative 3 effects regarding land use and planning policies would remain less than significant, like the Project.

Summary

Overall, Alternative 3 would not result in any new impacts that would not occur with the Project. However, this assessment suggests that it **may avoid the significant and unavoidable contribution to the cumulative VMT impact (Impact C-TRF-8)** given the contribution of Alternative 3 compared to that of a heavy industrial uses that is consistent with the existing General Plan designation on the Project site. All other impact determinations with Alternative 3 would remain the same as identified for the proposed Project, although relative effects are likely reduced. Given the different land use, some of the impacts and mitigation measures may not apply because of the different code and regulatory requirements for residential development compared to light industrial storage development. Also, the reduced intensity of development, in terms of site changes and proposed land use, means that Alternative 3 would have reduced less-than-significant effects overall.

5.4 Environmentally Superior Alternative

The No Project Alternative would be environmentally superior to the proposed Project on the basis of minimization or avoidance of physical environmental impacts. However, the No Project Alternative does not meet any of the Project objectives. CEQA requires that a second alternative be identified when the “No Project” alternative emerges as the environmentally superior alternative (CEQA *Guidelines*, Section 15126.6(e)). **Table 5-1** shows in bold, shaded text, impact determinations that are wholly changed from those identified for the proposed Project. Table 5-1 is an excerpt of the complete impacts comparison in Table 5-2 further in this chapter and supports the environmentally superior alternative evaluation.

Comparison of Reduced and Avoided Impacts

VMT

Alternative 3 would avoid the significant and unavoidable cumulative VMT impact (Impact C-TRF-8) identified for the Project due to the relative fewer VMT that the light industrial/self storage use would contribute to the cumulative VMT compared to a heavy industrial use consistent with the General Plan. The only other significant and unavoidable impact of the Project (Impact TRF-3) is the project-level VMT, which this assessment considers would still occur with Alternative 3. Alternative 2 does not avoid or substantially reduce this significant unavoidable impact.

Noise, Population and Public Services

Considering other Project impacts that are avoided under Alternative 3, these are avoided because no sensitive receptors (residents) residential operations or residential buildings would be introduced to the site, and vehicular traffic would be substantially less, compared to the Project.

**TABLE 5-1
SUMMARY OF REDUCED OR AVOIDED IMPACTS COMPARED TO THE PROJECT**

| NOTE: Significance levels shown in the table reflect levels of significance <i>after mitigation</i> and indicate maximum impact during buildout and operation, unless otherwise specified. | Project | Alt 1 No Project | Alt 2 Reduced Grading / 50 percent Development | Alt 3 Reduced Grading / Self Storage (LI) |
|--|----------------|-----------------------------|---|--|
| <i>BOLD/SHADED</i> designations indicate change from Project impact. | | | | |
| Impact GHG-1: The Project would generate GHG emissions that could have a significant impact on the environment. | LSM | N | LS | LSM↓ |
| Impact GHG-2: The Project would not conflict with an applicable plan, policy or regulation of an appropriate regulatory agency adopted for the purpose of reducing GHG emissions. | LSM | N | LS | LSM↓ |
| Impact NOI-2: Occupants of the proposed Project buildings could be exposed to high noise levels. | LS | N | LS | N |
| Impact NOI-3: Project operations could cause a long-term increase in ambient noise levels in the Project site vicinity. | LSM | N | LSM↓ | N |
| Impact POP-1: The Project would not directly or indirectly induce substantial population growth. | LS | N | LS↓ | N |
| Impact PUB-1: The Project would increase the demand for fire protection and emergency medical services, but would not result in the need for new or physically altered facilities, the construction of which would cause significant environmental impacts. | LSM | N | LSM↓ | LS |
| Impact PUB-3: The Project would increase the demand for public school services, but would not result in the need for the provision of new or physically altered facilities. | LS | N | LS↓ | N |
| Impact PUB-4: The Project would increase the demand for child care services, but would not result in the need for the provision of new or physically altered facilities. | LS | N | LS↓ | N |
| Impact C-TRF-8: The Project with a General Plan amendment would increase the Countywide VMT, resulting in a significant impact for the Project | SU | N | SU | LS |
| Legend LS Less than significant or negligible impact; no mitigation required LSM Less than significant adverse impact, after mitigation SU Significant and unavoidable adverse impact, after mitigation N No impact ↓ Impact is more severe or less severe than project impact, after mitigation | | | | |

These include impacts regarding noise exposure (Impact NOI-2) and ambient noise increase (Impact NOI-3); substantial population growth (Impact POP-1); and increased demand for emergency services (Impacts PUB-1), public school facilities (Impact PUB-3) and childcare facilities (Impact PUB-4). Table 5-1 shows that, while Alternative 2 does not *avoid* any of these impacts, it would *reduce* the effect to each (except noise exposure to new residents, Impact NOI-2), compared to the Project.

GHG Emissions

Although not avoided, the Project's less-than-significant after mitigation GHG effects (Impacts GHG-1 and GHG-2) would be *reduced* with Alternative 3, given its reduced development and light industrial/self storage use (as shown in Table 5-1). However, Table 5-1 shows that Alternative 2 would avoid these two less-than-significant after mitigation impacts. Alternative 2 would generate half the annual GHG emissions of the Project and would not exceed the emissions target threshold (see Appendix E). Although Alternative 3 would also generate notably fewer annual GHG emissions than the proposed Project (or Alternative 2), this assessment considers the impact would not change, given the high service emissions per service (employee) ratio likely, and the limited feasible mitigation approaches for this type of use.

Environmental Superior Alternative

Alternative 3 is considered environmental superior because it avoids a significant and unavoidable impact of the proposed Project that no other analyzed alternative avoids (except the No Project) (Impact C-TRF-8). Moreover, Alternative 3 avoids other less-than-significant impacts that result with the Project, including impacts that warranted mitigation with the Project and Alternative 2.

Beyond the physical environmental effects considered for the CEQA analysis, Alternative 3 would not meet the fundamental Project objective of developing residential use at the Project site. Alternative 2 would meet this objective to an extent (as well as avoid less-than-significant after mitigation GHG emissions impacts that would still occur with Alternative 3), but Alternative 3 is still considered environmentally superior as it would avoid significant unavoidable impact identified with the Project.

5.5 Alternative Considered but Rejected for Detailed Analysis

A Heavy Industrial use alternative was considered but rejected for detailed analysis in this EIR. The scenario would have considered development of the site with heavy industrial uses, consistent with the existing Heavy Industrial (H-I) zoning and Heavy Industry (HI) General Plan land use designation that currently apply to the property. Development of the site with heavy industrial uses could require roadway access for heavy trucks, which could involve additional grading to achieve roadways with substantially less-steep slopes than those proposed in the Project. Although existing zoning regulations would avoid inform the proximity and operation of a heavy industrial use on the site near existing residential uses, a heavy industrial use alternative

could generate air quality effects (operational criteria pollutants, TACs/human health risk exposure, and odors), noise effects, public roadway damage and/or hazardous materials effects that could be potentially greater than identified with the proposed Project. Further, a heavy industrial use scenario would not meet the basic Project objective of developing residential uses at the Project site. For these reasons, this alternative was considered but rejected for detailed analysis in this EIR.

Table 5-2 showing the comparative impacts of the proposed Project and each of the alternatives starts on the following page.

TABLE 5-2
SUMMARY OF IMPACTS: PROJECT AND ALTERNATIVES

NOTE: Significance levels shown in the table reflect levels of significance *after mitigation* and indicate maximum impact during buildout and operation, unless otherwise specified.

BOLD/SHADED designations indicate change from Project impact.

| | Project | Alt 1 No Project | Alt 2 Reduced Grading / 50 percent Development | Alt 3 Reduced Grading / Self Storage (LI) |
|---|---------|---------------------|---|--|
| 4.1. Aesthetics | | | | |
| Impact AES-1: Construction of the Project would create temporary aesthetic nuisances associated with Project construction and grading activities. | LSM | N | LSM↓ | LSM↓ |
| Impact AES-2: The Project would not have a substantial adverse effect on a scenic vista or adversely affect scenic resources along any designated scenic highway. | LS | N | LS | LS |
| Impact AES-3: The Project could alter the existing visual character of the Project site, but would not substantially degrade the existing visual quality of the site and its surroundings. | LS | N | LS | L↓ |
| Impact AES-4: The Project would introduce new sources of light and glare onto the Project site and increase ambient light in the vicinity. (Criterion d) | LS | N | LS | LS |
| Impact C-AES-1: The Project, in conjunction with cumulative development, would not result in a cumulative aesthetics impact related to scenic vistas and resources, or visual character and visual quality. | LS | N | LS | LS |
| 4.2. Air Quality | | | | |
| Impact AIR-1: The Project could conflict with or obstruct implementation of the applicable air quality plan. | LS | N | LS | LS |
| Impact AIR-2: Emissions from construction and operation of the Project would result in increased emissions of criteria air pollutants and contribute to existing air quality violations. | LSM | N | LSM↓ | LSM↓ |
| Impact AIR-3: Construction of the Project could increase emissions of toxic air contaminants (TACs), and increase health risks for nearby residents, and Project operations could expose sensitive receptors to substantial pollutant concentrations including toxic air contaminants and increase health risks for existing and proposed residents. | LSM | N | LSM↓ | LSM↓ |
| Impact AIR-4: The Project would locate sensitive receptors near existing sources of objectionable odors. | LS | N | LS | LS |
| Impact C-AIR-1: The Project, in combination with past, present, and reasonably foreseeable future development of cumulative projects would contribute to cumulative regional air quality impacts. | LSM | N | LSM | LSM |
| Impact C-AIR-2: The Project, in combination with past, present, and reasonably foreseeable future development of cumulative projects would contribute to cumulative health risk impacts on sensitive receptors. | LS | N | LS | LS |

Legend

| | |
|-----|--|
| LS | Less than significant or negligible impact; no mitigation required |
| LSM | Less than significant adverse impact, after mitigation |
| SU | Significant and unavoidable adverse impact, after mitigation |
| N | No impact |
| B | Beneficial |
| ↑↓ | Impact is more severe or less severe than project impact, after mitigation |

TABLE 5-2 (CONTINUED)
SUMMARY OF IMPACTS: PROJECT AND ALTERNATIVES

NOTE: Significance levels shown in the table reflect levels of significance *after mitigation* and indicate maximum impact during buildout and operation, unless otherwise specified.

BOLD/SHADED designations indicate change from Project impact.

| | Project | Alt 1 No Project | Alt 2 Reduced Grading / 50 percent Development | Alt 3 Reduced Grading / Self Storage (LI) |
|---|---------|---------------------|---|--|
| 4.3. Biological Resources | | | | |
| Impact BIO-1: Construction of the Project could have a substantial adverse effect, either directly or through habitat modifications, on special-status plant species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service. (Criterion a, in part) (<i>Potentially Significant prior to Mitigation</i>) | LSM | N | LSM | LSM |
| Impact BIO-2: Construction of the Project could have a substantial adverse effect, either directly or through habitat modifications, on amphibian or reptile species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service. | LSM | N | LSM | LSM |
| Impact BIO-3: Construction of the Project could have a substantial adverse effect, either directly or through habitat modifications, on migratory birds and/or on bird species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service. | LSM | N | LSM | LSM |
| Impact BIO-4: Construction of the Project could have a substantial adverse effect, either directly or through habitat modifications, on salt marsh harvest mouse and special-status bat species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service. | LSM | N | LSM | LSM |
| Impact BIO-5: Construction of the Project could have a substantial adverse effect on sensitive natural communities. | LSM | N | LSM | LSM |
| Impact BIO-6: Construction of the Project could have a substantial adverse effect on wetlands or other Waters of the U.S. and the State. | LSM | N | LSM | LSM |
| Impact BIO-7: The Project would not interfere substantially with the movement of native resident or migratory bird species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. | LSM | N | LSM | LSM |
| Impact BIO-8: The Project would not conflict with any local policies or ordinances protecting biological resources. | LSM | N | LSM | LSM |
| Impact C-BIO-1: The proposed Project, in conjunction with cumulative development in the region, could result in cumulative impacts on special-status species, habitats, wetlands and other waters of the U.S., to which the Project would have a cumulatively considerable contribution. | LSM | N | LS | LS |

Legend

| | |
|-----|--|
| LS | Less than significant or negligible impact; no mitigation required |
| LSM | Less than significant adverse impact, after mitigation |
| SU | Significant and unavoidable adverse impact, after mitigation |
| N | No impact |
| B | Beneficial |
| ↑↓ | Impact is more severe or less severe than project impact, after mitigation |

TABLE 5-2 (CONTINUED)
SUMMARY OF IMPACTS: PROJECT AND ALTERNATIVES

NOTE: Significance levels shown in the table reflect levels of significance *after mitigation* and indicate maximum impact during buildout and operation, unless otherwise specified.

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|--|---------|---------------------|---|--|
| 4.4. Cultural Resources and Tribal Cultural Resources | | | | |
| Impact CUL-1: The Project would involve extensive subsurface disturbance that could potentially encounter and damage previously undiscovered archaeological resources, human remains, and tribal cultural resources. | LSM | N | LSM | LSM |
| Impact C-CUL-1: The Project, in conjunction with cumulative development, could contribute to cumulative impacts on cultural resources. | LS | N | LS | LS |
| 4.5. Geology and Soils | | | | |
| Impact GEO-1: The Project could directly or indirectly cause substantial adverse effects involving slope instability hazards, including landslides, debris flows, and rockfalls caused by seismic or nonseismic mechanisms. | LSM | N | LSM [↓] | LSM [↓] |
| Impact GEO-2: The Project could directly or indirectly expose people or structures to strong ground shaking from a seismic event on one of the regional active faults, causing substantial risk of loss, injury, or death. | LSM | N | LSM | LSM |
| Impact GEO-3: The Project site would be susceptible to settlement from static forces or earthquake induced forces, posing substantial risk of structural damage or personal injury. | LSM | N | LSM | LSM |
| Impact GEO-4: Project construction would loosen and expose substantial volumes of surface soils susceptible to loss of topsoil and erosion. | LSM | N | LSM | LSM |
| Impact GEO-5: The Project site would be susceptible to expansive soils, posing substantial risk of structural damage or personal injury. | LSM | N | LSM | LSM |
| Impact GEO-6: The Project would involve extensive subsurface disturbance that could potentially encounter and damage previously undiscovered buried paleontological resources or unique geological features. | LSM | N | LSM | LSM |
| Impact C-GEO-1: The Project, in conjunction with cumulative development, would not result in significant cumulative impacts with respect to geology, soils, or seismicity to which the Project would have a cumulatively considerable contribution. | LS | N | LS | LS |
| 4.6. Greenhouse Gas Emissions and Energy | | | | |
| Impact GHG-1: The Project would generate GHG emissions that could have a significant impact on the environment. | LSM | N | LS | LSM [↓] |
| Impact GHG-2: The Project would not conflict with an applicable plan, policy or regulation of an appropriate regulatory agency adopted for | LSM | N | LS | LSM [↓] |

Legend

| | |
|-----|--|
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TABLE 5-2 (CONTINUED)
SUMMARY OF IMPACTS: PROJECT AND ALTERNATIVES

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|--|---------|---------------------|---|--|
| the purpose of reducing GHG emissions. | | | | |
| Impact ENE-1: The Project would not result in wasteful, inefficient and unnecessary use of energy and the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. | LS | N | LS | LS [↓] |
| 4.7. Hazards and Hazardous Materials | | | | |
| Impact HAZ-1: The Project would use hazardous materials (i.e., solvents) onsite during construction that could be released to the environment through improper handling or storage. | LSM | N | LSM | LSM |
| Impact HAZ-2: Project operations would generate general household and maintenance hazardous waste. | LS | N | LS | LS |
| Impact HAZ-3: The Project would be developed where existing crude oil pipelines transect the Project site, which could present a hazard to the public or environment in the event of accidental upset. | LSM | N | LSM | LSM |
| Impact HAZ-4: The Project site is within the Contra Costa County Airport Land Use Plan and the Buchanan Field Airport Influence Area, and could result in a safety hazard or excessive noise for people residing in the area. | LS | N | LS | LS |
| Impact HAZ-5: The Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. | LS | N | LS | LS |
| Impact C-HAZ-1: The Project, in conjunction with cumulative development, would not result in cumulative impacts related to hazards and hazardous materials to which the Project would have a cumulatively considerable contribution. | LS | N | LS | LS |
| 4.8. Hydrology and Water Quality | | | | |
| Impact HYD-1: The Project could result in an increase of stormwater pollutants due to construction activities and/or the introduction of new impervious surfaces, but would not violate any water quality standards or waste discharge requirements. | LS | N | LS | LS |
| Impact HYD-2: The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that it would impede sustainable groundwater management of the basin. | LS | N | LS | LS |
| Impact HYD-3: The Project would not substantially alter the drainage pattern of the site such that it would result in substantial erosion or siltation onsite or offsite. | LS | N | LS | LS |

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| Impact HYD-4: The Project would not substantially alter the drainage pattern of the site or surrounding areas such that it would result in flooding on- or off-site. | LS | N | LS | LS |
| Impact HYD-5: The Project would not create or contribute runoff water which would exceed the capacity of existing or planned drainage systems, or provide substantial additional sources of polluted runoff. | LS | N | LS | LS |
| Impact HYD-6: The Project could develop structures which would impede or redirect flood flows. | LS | N | LS | LS [↓] |
| Impact HYD-7: The Project could conflict with a water quality control plan or sustainable groundwater management plan. | LS | N | LS | LS |
| Impact C-HYD-1: The Project, in conjunction with cumulative development, would not result in cumulative impacts with respect to hydrology and water quality to which the Project would have a cumulatively considerable contribution. | LS | N | LS | LS |
| 4.9. Land Use, Plans and Policies | | | | |
| Impact LUP-1: The Project would not divide an established community. | LS | N | LS | LS |
| Impact LUP-2: The Project, including the proposed amendments to the General Plan and zoning designation, would not conflict with adopted applicable land use plans and policies such that the Project is inconsistent with the General Plan. | LS | N | LS | LS [↓] |
| Impact C-LUP-1: Development of the Project, in combination with past, present, existing, approved, pending and reasonably foreseeable future projects within and in the vicinity of the Project site, would not result in significant cumulative impacts to land use and planning. | LS | N | LS | LS |
| 4.10. Noise | | | | |
| Impact NOI-1: Construction of the Project would result in a temporary increase in ambient noise levels. | LSM | N | LSM [↓] | LSM [↓] |
| Impact NOI-2: Occupants of the proposed Project buildings could be exposed to high noise levels. | LS | N | LS | N |
| Impact NOI-3: Project operations could cause a long-term increase in ambient noise levels in the Project site vicinity. (| LSM | N | LSM [↓] | N |
| Impact C-NOI-1: Project construction activities, in conjunction with construction noise from cumulative development noise in the vicinity of the Project site, could cause a substantial temporary or periodic increase in ambient noise levels in the Project site vicinity during construction. | LS | N | LS | LS |

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| Impact C-NOI-2: Operation of the proposed Project, in conjunction with cumulative development, would not cause a substantial permanent increase in ambient noise levels in the Project vicinity. | LS | N | LS | LS |
| 4.11. Population and Housing | | | | |
| Impact POP-1: The Project would not directly or indirectly induce substantial population growth. | LS | N | LS↓ | N |
| Impact C-POP-1: The Project, in conjunction with cumulative development, would not result a significant cumulative impact by directly or indirectly causing substantial growth, and to which the Project would have a cumulatively considerable contribution | LS | N | LS | LS |
| 4.12. Public Services and Recreation | | | | |
| Impact PUB-1: The Project would increase the demand for fire protection and emergency medical services, but would not result in the need for new or physically altered facilities, the construction of which would cause significant environmental impacts. | LSM | N | LSM↓ | LS |
| Impact PUB-2: The Project would increase the demand for police protection services, but would not result in the need for the provision of new or physically altered facilities, the construction of which would cause significant environmental impacts. | LS | N | LS↓ | LS↓ |
| Impact PUB-3: The Project would increase the demand for public school services, but would not result in the need for the provision of new or physically altered facilities. | LS | N | LS↓ | N |
| Impact PUB-4: The Project would increase the demand for child care services, but would not result in the need for the provision of new or physically altered facilities. | LS | N | LS↓ | N |
| Impact PUB-5: The Project would increase the use of existing parks or other recreational facilities, but not such that substantial physical deterioration would occur or new or expanded facilities would be required. | LS | N | LS↓ | LS↓ |
| Impact C-PUB-1: The Project, in conjunction with cumulative development, would not result in cumulative impacts on public services and recreation to which the Project would have a cumulatively considerable contribution. | LS | N | LS | LS |

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| 4.13. Transportation | | | | |
| Impact TRF-1: Project construction would result in temporary increases in truck traffic and construction worker traffic. | LSM | N | LSM↓ | LSM↓ |
| Impact TRF-2: Project-generated increases in heavy truck traffic on area roadways during Project construction could result in substantial damage to or wear of public roadways. | LSM | N | LSM↓ | LSM↓ |
| Impact TRF-3: Total Home-Based VMT per resident generated by the Project would be greater than 15 percent below the regional VMT for similar uses in Contra Costa County, resulting in a significant impact for the Project. | SU | N | SU | SU |
| Impact TRF-4a: The Project would increase traffic volumes on residential roadway segments near the Project site resulting in obstacles (or hazards) for project vehicle traffic. | LSM | N | LSM↓ | LSM↓ |
| Impact TRF-4b: The Project would not have adverse impacts to the project site's vehicle system. | LS | N | LS | LS |
| Impact TRF-5: The Project could increase ridership on public transit serving the Project area. | LS | N | LS↓ | LS↓ |
| Impact TRF-7a: Emergency access to the Project site would be through existing streets that would be incompatible with the existing transportation infrastructure by exposing emergency vehicles to hazards. (Criterion d) (Potentially Significant) | LSM | N | LSM | LSM |
| Impact TRF-7b: The Project would not have adverse impacts to the project site's emergency vehicle system. | LS | N | LS | LS |
| Impact C-TRF-8: The Project with a General Plan amendment would increase the Countywide VMT, resulting in a significant impact for the Project | SU | N | SU | LS |
| 4.14. Utilities and Service Systems | | | | |
| Impact UTIL-1: The Project would increase domestic and emergency water demand, but would not exceed water supplies available from existing entitlements and resources. | LSM | N | LSM↓ | LSM↓ |
| Impact UTIL-2: The Project would require or result in construction of new or expanded water facilities, the construction of which would cause significant environmental effects. | LSM | N | LSM | LSM |
| Impact UTIL-3: The Project would require or result in construction of new or expanded stormwater drainage facilities, the construction of which could cause significant environmental effects. | LSM | N | LSM | LSM |

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| Impact UTIL-4: The Project would generate demand for wastewater utility service, and would result in the expansion of the existing wastewater collection system, the construction of which would not cause significant environmental effects. | LSM | N | LSM↓ | LSM↓ |
| Impact UTIL-5: The Project would generate solid waste, but would not exceed the permitted capacity of the landfill serving the Project site, and would comply with federal, state and local statutes and regulations related to solid waste. | LS | N | LS↓ | LS↓ |
| Impact C-UTIL-1: The Project, in conjunction with cumulative development, would not result in cumulative impacts on utilities and service systems to which the Project would have a cumulatively considerable contribution. | LS | N | LS | LS |

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