

Creekside/Vineyards at Sand Creek Project

SCH# 2020039044

Final Environmental Impact Report

Prepared for
City of Antioch



September 2020

Prepared by



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Creekside/Vineyards at Sand Creek Project Final Environmental Impact Report

SCH# 2020039044

Lead Agency

City of Antioch
Community Development Department
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1. Introduction and List of Commenters

1. INTRODUCTION AND LIST OF COMMENTERS

1.1 INTRODUCTION

This Final Environmental Impact Report (EIR) contains comments received during the public review period of the Creekside/Vineyards at Sand Creek Project (proposed project) Draft EIR. This document has been prepared by the City of Antioch, as Lead Agency, in accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, Section 15132. The Introduction and List of Commenters chapter of the Final EIR discusses the background of the Draft EIR and purpose of the Final EIR, and provides an overview of the organization of the Final EIR.

1.2 BACKGROUND

The Draft EIR identified the proposed project's potential impacts and the mitigation measures that would be required to be implemented. The Creekside/Vineyards at Sand Creek Project Draft EIR includes the following environmental analysis chapters: Air Quality and Greenhouse Gas Emissions, and Transportation. The remaining environmental issue areas identified by Appendix G of the CEQA Guidelines are addressed in the Initial Study prepared for the proposed project and included as Appendix A of the Creekside/Vineyards at Sand Creek Project Draft EIR.

In accordance with CEQA, the City of Antioch used the following methods to solicit public input on the Draft EIR:

- A Notice of Preparation (NOP) for the Draft EIR was released for a 30-day public review period from March 16, 2020 to April 14, 2020. The NOP comment letters are included as Appendix B to the Draft EIR.
- A public scoping meeting was held through Zoom on April 9, 2020 to solicit comments regarding the scope of the Draft EIR.
- On July 20, 2020, the Draft EIR was submitted to the State Clearinghouse for distribution to State and local agencies, resulting in a 45-day public review period from July 20, 2020 to September 3, 2020.
- On July 20, 2020, a Notice of Availability (NOA) of the Draft EIR was posted to the City's website, and mailed to local agencies and interested members of the public.
- The Draft EIR was made available for review on the City's website at <https://www.antiochca.gov/community-development-department/planning-division/environmental-documents/>.

All public comments received on the Draft EIR are listed in this chapter, and written responses to comments are included in Chapter 2, Response to Comments, as discussed in more detail in Section 1.4 of this chapter.

1.3 PURPOSE OF THE FINAL EIR

Pursuant to CEQA Guidelines Section 15132, this Final EIR consists of the following:

1. Comments received on the Draft EIR (Chapter 2 of this Final EIR);
2. Revisions to the Draft EIR (Chapter 3 of this Final EIR);



3. A list of persons, organizations, and public agencies commenting on the Draft EIR (included as Section 1.4 of this chapter); and
4. Any other information added by the Lead Agency.

Although CEQA requires responses for “significant environmental issues” only, the City has provided responses to all comments that address the adequacy of the Draft EIR.

1.4 LIST OF COMMENTERS

The City of Antioch received two comment letters during the public comment period on the Draft EIR for the proposed project. The comment letters were authored by the following agencies and individuals.

Letter 1 California Department of Transportation
Letter 2 Newmeyer & Dillion LLP

1.5 CERTIFICATION OF THE FINAL EIR

State law requires that the City make several types of CEQA “findings” at the time of final action on the project. Findings describe the conclusions reached regarding particular issues, including specific evidence in support of those conclusions. The Final EIR typically provides much of the substantial evidence to support these findings. The required findings for the project are as follows:

- Certification of the Final EIR (CEQA Guidelines Section 15090) – These findings support the adequacy of the Final EIR for decision-making purposes. The Lead Agency must make the following three determinations in certifying a Final EIR:
 1. The Final EIR has been completed in compliance with CEQA.
 2. The Final EIR was presented to the decision-making body of the Lead Agency, and the decision-making body reviewed and considered the information in the Final EIR prior to approving the project.
 3. The Final EIR reflects the Lead Agency’s independent judgment and analysis.
- Findings Regarding Significant Impacts and Project Alternatives (CEQA Guidelines Section 15091) – These findings explain how the City chose to address each identified significant impact, including the mitigation measures adopted or an explanation of why such measures are infeasible. A discussion of the feasibility of project alternatives is also required by this section (see also CEQA Guidelines Section 15126.6[f]).

Pursuant to CEQA Guidelines, Section 15093(b), when a Lead Agency approves a project that would result in significant unavoidable impacts, the agency must state in writing the reasons supporting the action (Statement of Overriding Considerations). The Statement of Overriding Considerations shall be supported by substantial evidence. The Creekside/Vineyards at Sand Creek Project would result in significant and unavoidable impacts related to greenhouse gas (GHG) emissions and transportation; thus, a Statement of Overriding Considerations must be adopted if the project is approved. The required Findings of Fact and Statement of Overriding Considerations will be included as part of the resolution considered by the City of Antioch.



1.6 ORGANIZATION OF THE FINAL EIR

The Final EIR is organized into the following four chapters.

1. Introduction and List of Commenters

Chapter 1 provides an introduction and overview of the document, describes the background of the Draft EIR and the purposes of the Final EIR, provides a list of commenters, and describes the organization of the Final EIR.

2. Responses to Comments

Chapter 2 presents the comment letters received, and responses to each comment. Each comment letter received has been numbered at the top and bracketed to indicate how the letter has been divided into individual comments. Each comment is given a number with the letter number appearing first, followed by the comment number. For example, the first comment in Letter 1 would have the following format: 1-1. The response to each comment will reference the comment number.

3. Revisions to the Draft EIR Text

Chapter 3 summarizes changes made to the Draft EIR text including clarifications, modifications, and amplifications of the analysis. Section 15088.5 of the State CEQA Guidelines states that a lead agency is required to recirculate a Draft EIR when "significant new information" is added to the document after public notice is given of the availability of the Draft EIR for public review under Section 15087 but before certification. Pursuant to this section, the term "information" can include changes in the project or environmental setting, as well as additional data or other information. New information added to an EIR is not considered "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the City has decided not to implement.

"Significant new information" requiring recirculation includes any of the following:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
4. The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. The modifications to the Draft EIR identified in Chapter 3 have been examined with these requirements and obligations in mind. The City has determined that the provisions of Section 15088.5 of the CEQA Guidelines are not triggered and recirculation of this EIR is not required. A more detailed description of this determination will be included in the CEQA Findings of Fact described above.



4. Mitigation Monitoring and Reporting Program

CEQA Guidelines, Section 15097, requires lead agencies to adopt a program for monitoring the mitigation measures required to avoid the significant environmental impacts of a project. The intent of the Mitigation Monitoring and Reporting Program (MMRP) is to ensure implementation of the mitigation measures identified within the EIR for the Creekside/Vineyards at Sand Creek Project.



2. Responses to Comments

2. RESPONSES TO COMMENTS

2.1 INTRODUCTION

The Responses to Comments chapter contains responses to each of the comment letters submitted regarding the Creekside/Vineyards at Sand Creek (proposed project) Draft EIR during the public review period.

2.2 RESPONSES TO COMMENTS

Each bracketed comment letter is followed by numbered responses to each bracketed comment. The responses amplify or clarify information provided in the Draft EIR and/or refer the reader to the appropriate place in the document where the requested information can be found. Comments that are not directly related to environmental issues (e.g., opinions on the merits of the project that are unrelated to its environmental impacts) are either discussed or noted for the record. Where revisions to the Draft EIR text are required in response to the comments, such revisions are noted in the response to the comment, and are also listed in Chapter 3 of this Final EIR. All new text is shown as double underlined and deleted text is shown as ~~struck through~~.



Letter 1

STATE OF CALIFORNIA----- CALIFORNIA STATE TRANSPORTATION AGENCY

Gov. Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
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Making Conservation
a California Way of Life.

September 3, 2020

SCH # 2020039044
GTS # 04-CC-2020-0047
GTS ID: 19235
CC/4/33.699

Alexis Morris, Planning Manager
City of Antioch
Community Development Department
P.O. Box 5007
Antioch, CA 94531-5007

Creekside/ Vineyards at Sand Creek- Draft Environmental Impact Report (DEIR)

Dear Alexis Morris:

1-1

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Creekside/Vineyards at Sand Creek project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the June 2020 DEIR.

Project Understanding

The proposed project description includes 220 single-family residential units and associated improvements on a 158.2-acre project site, as well as 1.8 acres of off-site improvements. The project site is located on the West side of State Route (SR)-4, City of Antioch/Contra Costa County line to the south and the City of Antioch/City of Brentwood limit to the east.

1-2

This project's DEIR has identified significant and unavoidable environmental impacts related to transportation. The [Caltrans Transportation Impact Study Guide \(TISG\)](#) identifies techniques that support reduction of project-related VMT, increased accessibility to destinations using active transportation and transit, as well as methods to analyze possible impacts to the State Highway System and its users. We encourage the City to refer to the Caltrans TISG to identify opportunities to achieve reductions in VMT for this and future land use projects.

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Hydraulics

Please provide a Hydrology study that includes a drainage plan and resubmit for a follow-up review. The requested study also includes existing and proposed drainage patterns that addresses the concerns listed on page 14 of 2065 in the DEIR. Please address:

1-3

- Downstream impacts to drainage areas and impacts on the capacity of State (SR-4) facilities due to increased water flow;
- Effects on natural watercourses;
- Design and construction of storm drain facilities;
- Overflow from significant storm events and post-development peak flows;
- Compliance with environmental permit requirements, special conditions, and mitigation measures for new outfalls, bridges, or creek improvements; and impacts to Sand Creek and its natural stream processes. In addition, provide calculation for post-construction 100-year peak flows that do not exceed the 100-year pre-construction flows.

Transportation Impact Fees

We acknowledge and accept the fair share contributions towards improvement projects in the area through payment into regional transportation impact fees to mitigate the project impact to State facilities.

1-4

We encourage a sufficient allocation of fair share contributions toward multimodal and regional transit improvements to fully mitigate cumulative impacts to regional transportation. Caltrans welcomes the opportunity to work with the City and local partners to secure the funding for needed mitigation. Traffic mitigation or other cooperative agreements are examples of such measures.

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1-5

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Laurel Sears at laurel.sears@dot.ca.gov. Additionally, for future notifications and requests for review of new projects, please contact LDIGR-D4@dot.ca.gov.

Sincerely,



Mark Leong
District Branch Chief
Local Development - Intergovernmental Review

cc: State Clearinghouse

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"



**Letter 1
Cont'd**

First Name / Last Name
Community Development Department
City of Livermore
1052 S. Livermore Avenue
Livermore, CA 94550



**LETTER 1: MARK LEONG, CALIFORNIA DEPARTMENT OF
TRANSPORTATION**

Response to Comment 1-1

The comment is an introductory statement and does not address the adequacy of the Draft EIR.

Response to Comment 1-2

The comment does not address the adequacy of the Draft EIR. Nonetheless, the comment will be forwarded to the decision-makers for their consideration.

Response to Comment 1-3

As noted on page 3-1 of the Draft EIR, State Route 4 (SR-4) is located approximately 0.38-mile east of the project site. Due to the distance between SR-4 and the project site, the proposed project would not result in any impacts to SR-4 facilities.

All of the hydrology-related concerns listed on page 1-5 of the Draft EIR, as reiterated by the commenter, are addressed in detail in the Hydrology and Water Quality section of the Initial Study prepared for the proposed project, which was circulated for public review with the NOP and included in Appendix A to the Draft EIR. As discussed therein, a detailed hydrology study, entitled Stormwater Control Plan for Creekside Vineyards at Sand Creek, was completed by Balance Hydrologics, Inc. As presented on page 85 of the Initial Study, according to the hydrology study, the modeled post-project runoff flows from the project site would not exceed pre-project runoff flows.

Response to Comment 1-4

The comment expresses acceptance of the mitigation measures presented in the Draft EIR, and does not further address the adequacy of the Draft EIR.

Response to Comment 1-5

The comment is a conclusion statement and does not address the adequacy of the Draft EIR.



Letter 2



Newmeyer & Dillion LLP
895 Dove Street
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Newport Beach, CA 92660
949 854 7000

September 2, 2020

Gregory D. Tross
Greg.Tross@ndlf.com

VIA U.S. MAIL & E-MAIL

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Re: Comments on the Draft Environmental Impact Report for the
Creekside/Vineyards at Sand Creek Project (SCH # 2017111069)

Dear Ms. Morris:

2-1

On behalf of DeNova Homes, Inc. ("DeNova") and in accordance with the California Environmental Quality Act (Pub. Resources Code, § 21000, et seq.) ("CEQA"), we submit this comment letter regarding the City of Antioch's ("City") Draft Environmental Impact Report, SCH 20200390426, ("DEIR") for the Creekside/Vineyards at Sand Creek Project ("Project").¹

Please note that this comment letter is preliminary. DeNova reserves its right to revise and/or supplement its comments on the DEIR up to the final public hearing on the Project.

2-2

1. **The DEIR's Project Description Is Inaccurate and Incomplete.**

An environmental impact report ("EIR") is at the heart of the environmental review process established by CEQA.² A proper EIR provides the public and governmental decision-makers with detailed information on a project's likely environmental effects, describes the ways of minimizing such effects, and considers potential alternatives to a project.³

¹ See generally Raney, Draft Creekside/Vineyard at San Creek Project Environmental Impact Report, July 2020

² *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, at p. 810 [108 Cal.Rptr.377]; see also 14 Cal. Code Regs., § 15124.

³ Public Res. Code, §§ 21002.1, 21061, 21100.

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**Letter 2
Cont'd**

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An accurate project description “is the sine qua non of an informative and legally sufficient EIR.” When a proposed project is accompanied by an inaccurate or incomplete description, it undermines CEQA by drawing “a red herring across the path of public input.” A court will reject an EIR with an incomplete or inaccurate project description because, as the court stated in *County of Inyo v. City of L.A.*:

Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the “no project alternative”) and weigh other alternatives in the balance.⁴

The Project proposes a large-scale planned residential development that contemplates the development of 220 single-family homes in three different phases. In order to accomplish this, the Project requires the following:

- General Plan Amendment
- Rezoning from Study District to Planned Development.
- Approval of Vesting Tentative Subdivision Maps
- Design Review
- Resource Management Plan
- Development Agreement

The Project description is inaccurate as it fails to identify, or consider the changes to existing land use designations and the resultant increased density such new zoning can bring to the Project's planned area.

2-3

(a) The Project Description Allows for the Construction of Over 500 Dwelling Units, Not Just 220.

As part of the Project approvals, the DEIR proposes a “General Plan text and map amendment to the Sand Creek Focus Area of the General Plan to change the land use designation of the site from Open Space/Senior Housing and Hillside, Estate and Executive Residential/Open Space to Medium Low Density Residential/Open Space.”⁵ Such an amendment would facilitate an increase in density for the Project Site from 1.0 and 2.0 du/acre to 3.7 du/acre.⁶ While the Project contemplates 220 units at 3.7 du/acre (58.9 acres), using the proposed designations as outlined in the Project Description allows for development at a higher density.

⁴ *Id.* at p. 198.

⁵ DEIR, at 2-2.

⁶ DEIR, at 2-6.



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Cont'd

The Project does not contemplate the environmental impacts that may result from a General Plan Amendment that permits at least an additional 300 dwelling units within the entire Project area. The additional areas are to be retained, but not contemplated, as open space. They will be designated as medium density, potentially permitting further development.⁷ The proposed General Plan Amendment for the entire project area thus is not adequately factored into the DEIR's analyses.

(b) **The DEIR's Project Description Does Not Adequately Address the Environmental Impacts from Rezoning the Project Site.**

The Project's description calls for a Rezone from Study District to Planned Development with special development standards for the Project.⁸ However, the PD development standards are not considered in the DEIR and the DEIR does not specify how they will affect the Project's environmental impacts.

2-4

Moreover, the contemplated rezoning of the Project site from Study District to Planned Development District is not adequately assessed in the DEIR. In accordance with the City's Zoning Ordinance,⁹ the Study District is meant to provide property for "the exploration for, drilling, and recovery of oil, gas and other hydrocarbons, including injection wells."¹⁰ However, the DEIR does not discuss whether the Project site actually was used for oil/gas exploration purposes as was intended. Such information is necessary for any environmental study as the Study Districts are meant to ensure that gas exploration is performed in a way that protects the public health, safety, and welfare, **proposed residential uses, and the quality of the environment.**¹¹ The Project site's prior history does not analyze whether the area was used in accordance with its zoned purposes and whether such uses have an environmental impact on the proposed Project.

Because the DEIR relies on inaccurate and incomplete estimates of projected development density, an inaccurate Project Description, and inaccurate descriptions on the rezoning aspects of the Project site, the analysis that follows is flawed. Once the DEIR is revised to include an accurate Project description that clearly identifies the planning areas, their existing land use designations, proposed changes in those land use designations, and the associated changed in density affect the entire project site, the additional substantive issues may be addressed.

2-5

2. **The DEIR's Analysis of Air Quality Impacts is Deficient.**

The Legislature has made clear that an EIR is "an informational document" and

⁷ DEIR, at 1-2.

⁸ DEIR, at 3-15

⁹ See generally, City of Antioch Zoning Ordinance (last accessed August 31, 2020) (hereinafter "Zoning Ordinance"), available at https://codelibrary.amlegal.com/codes/antioch/latest/antioch_ca/0-0-0-30501

¹⁰ Zoning Ordinance, § 9-5.3834.

¹¹ *Id.*



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Cont'd

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that "[t]he purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project."¹² As one court observed,

If CEQA is scrupulously followed, the public will know the basis on which its responsible officials either approve or reject environmentally significant action, and the public, being duly informed, can respond accordingly to action with which it disagrees.¹³

The upshot of the purpose of the EIR process is to protect not only the environment but also informed self-government.¹⁴

The DEIR's air quality analysis fails the above standard on a number of grounds. It takes into account only the Promenade Project to the north of the Project site, but neglects to take into consideration other adjacent single-family residences and developments that either are under construction or are scheduled to be processed and/or approved.¹⁵ On this point, it is important to note that residences are "sensitive receptors," subject to more heightened scrutiny under CEQA. As construction is based on an extended, phased approach, the DEIR must take into account the air quality issues with construction and increased density in conjunction with the nearby sensitive receptors, including those to the surrounding single-residential areas currently under construction or to be under construction in the short term.

2-6

The DEIR's analysis of temporary construction impacts does not adequately disclose how mitigation will address specific criterion pollutants. First, the DEIR reveals that construction-related emissions would be generated from "construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for entire construction period."¹⁶ The DEIR notes, "construction of the proposed project could significantly contribute to the region's nonattainment status for ozone or PM nor would the project obstruct the implementation of an applicable air quality plan, and a **potentially significant** impact associated with construction-related emissions would result."¹⁷ The reader cannot determine whether the construction would have a potentially significant impact on ROG, PM, and NOx, or

¹² *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376 764 P.2d 278253 Cal.Rptr. 426; Pub. Resources Code, § 21061; Guidelines, § 15003, subds. (b)-(e).

¹³ *People v. County of Kern* (1974) 39 Cal.App.3d 830, 842, 115 Cal.Rptr. 67; Guidelines, § 15003, subd. (e).

¹⁴ *Ibid.*

¹⁵ DEIR, at 4.1-10.

¹⁶ DEIR., at 4.1-30.

¹⁷ DEIR., at 4.1-31.



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Cont'd**

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Cont'd** whether the Project will significantly obstruct the applicable air quality plan. Such information must be provided in a clear manner so that the public can better assess the Project's construction impacts.
- 2-7** With regard to operational impacts, ROG is revealed to pose a potentially significant impact.¹⁸ It is not clear how Mitigation Measure 4.1-2, which addresses only the installation of natural gas fireplaces, could reduce emission of volatile ROGs from 240.63 lbs/day to below the significance threshold of 54 lbs/day. Given the Project's operational ROG levels, it is not clear how the DEIR arrives at its conclusion that cumulative ROG emissions will not reach levels of significance based merely on the implementation of MM 4.1-2.
- 2-8** Finally, the DEIR concludes that the Project will have cumulatively considerable and significant and unavoidable effects on air quality.¹⁹ However, the mitigation measures set forth in the DEIR are undefined and do not require the applicant to actually reduce the localized impacts the Project will have on the air quality environment.²⁰ For instance, the DEIR presents yet to be determined mitigation measures to be "ensured" and carried out by contractors, and therefore leaves open the question of whether the applicant will actually mitigate project-specific and cumulative, significant impacts.²¹
- 2-9** **3. The DEIR's Traffic Impacts Analysis Is Deficient.**
The DEIR fails to properly assess the traffic impacts and conflicts that may result from the use of local residential streets, both during construction and after the Project is completed.
- 2-10** The DEIR reveals that the VMT resulting from the Project would be well above the average daily VMT per resident in Contra Costa County and be significant and unavoidable.²² The DEIR also does not adequately explain the mitigating factors that alternative senior-living project would have on the VMT analysis. The DEIR contemplates that VMT will be reduced under the proposed senior residence alternative, but does not determine whether such mitigating measures would or should be utilized. Instead, the DEIR merely denotes that "a detailed traffic impact study would be required."²³ Such a study should be completed and incorporated into the DEIR to adequately analyze the Project's potential alternatives.
- 2-11** The DEIR contemplates emergency vehicle access at two points to the Project,

¹⁸ DEIR, at 4.1-34.

¹⁹ DEIR, at 4.1-55.

²⁰ *Ibid.*

²¹ See, e.g., DEIR at 4.1-32.

²² DEIR, at 4.2-37-38.

²³ DEIR, at 6-20.



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Cont'd

even though only one access area has been confirmed via Hillcrest.²⁴ Emergency vehicle access via the PG&E Bridge on the northern portion of the Project site has not been adequately confirmed and therefore the DEIR should review emergency transportation impacts based upon access from the gated area on Hillcrest only.²⁵

2-12

4. The DEIR Improperly Defers Mitigation.

One of the fundamental tenants of CEQA is the requirement that the lead agency adequately describe mitigation measures; the requirement is "intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects."²⁶ These requirements serve as the basis for the general rule that it is inappropriate to postpone the formulation of mitigation measures.²⁷ This general rule against deferral also is set forth in the regulation that governs the contents of EIRs: "Formulation of mitigation measures should not be deferred until some future time."²⁸ In this case, the DEIR, must be revised to avoid deferred mitigation. For example, Mitigation Measure 4.1-6 defers mitigation of potentially significant greenhouse gas emissions by requiring the applicant to "prepare and submit to the City a GHG Reduction Plan" well after project approval, but before issuance of grading permits.²⁹ The readers of the DEIR have no way of knowing what the mitigation will be and therefore are deprived of the opportunity to review and comment on it.³⁰

2-13

5. The DEIR's Cumulative Impacts Analysis Is Deficient.

As noted above, the DEIR's air quality analysis takes into account only the Promenade Project to the north of the Project site, but neglects to take into consideration other adjacent single-family residences and developments that either are under construction or are scheduled to be processed and/or approved, despite the conclusion that "the majority of the surrounding area has been approved or planned for

²⁴ DEIR, at 4.2-41.

²⁵ *Ibid.* It should also be noted that the DEIR does not contemplate the impacts the proposed gated entrance will have on emergency access to the Project site. While the project notes that emergency vehicles will have an access code, potential congestion in at the gate entrance has not been assessed. In Chapter 6, the DEIR does not contemplate the increased emergency access provided under the non-gate project alternative. (see, DEIR, at 6-7.)

²⁶ Pub. Res. Code, § 21002.

²⁷ 1 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act (Cont.Ed.Bar 2d ed. 2013) § 14.12, pp. 697-698 (rev. 3/13).

²⁸ CEQA Guidelines, § 15126.4, subd. (a)(1)(B).

²⁹ DEIR, at 4.1-55.

³⁰ *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 306-307, 248 Cal.Rptr. 352 [improper to defer formulation of mitigation measures until after project approved].



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residential development.”³¹ Elsewhere, the DEIR concludes that the Albers Ranch project is too speculative to include in a construction impacts analysis, but includes the Vineyards at Deer Creek in its cumulative traffic analysis.³² The DEIR otherwise omits analysis of the Bridle Gate project in the City of Brentwood, but concludes that “the cumulative setting for the proposed project is generally considered to be development anticipated to occur upon buildout of the Antioch General Plan (i.e., Antioch City limits), as well as buildout of a number of approved or reasonably foreseeable projects within the project region.”³³

2-14

To properly serve as a public informational document, the DEIR requires a coherent and consistent cumulative impacts setting with a set list of “other closely related past, present and reasonably foreseeable probable future projects.”³⁴ The list must be consistently applied throughout the document. Moreover, the DEIR cannot necessarily rest on the premise that build-out of the region will be pursuant to the General Plan. This very project departs from the General Plan, and therefore the General Plan conclusions of the build-out of the area cannot serve as an adequate baseline for a cumulative impacts analysis.

2-15

6. Conclusion

For the above reasons, the DEIR is inadequate as a matter of law. It provides neither the City nor the public with the information necessary to approve the Project, as mandated by CEQA. The DEIR must be substantially revised and recirculated to address the deficiencies described herein. DeNova reserves its right to supplement these comments up until the close of the final public hearings on the Project.

Very truly yours,



Gregory D. Tross

³¹ DEIR, at 3-4; 4.1-10.

³² DEIR, 4.1-44; 4-2.26.

³³ DEIR, 4-06

³⁴ *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 32 Cal.Rptr.2d 704; Pub.Resources Code, § 21083, subd. (b); State CEQA Guidelines, §§ 15130,

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LETTER 2: GREGORY TROSS, NEWMeyer & DILLION, LLP

Response to Comment 2-1

The comment is an introductory statement and does not address the adequacy of the Draft EIR.

Response to Comment 2-2

As presented on page 3-5 of the Project Description chapter of the Draft EIR, the proposed changes to the project site's land use and zoning designations are explicitly identified and described as follows:

General Plan Amendment

The proposed project would include a General Plan Amendment (GPA) to the Land Use Map for the Sand Creek Focus Area of the General Plan to change the land use designations of the site from Open Space/Senior Housing and Hillside, Estate and Executive Residential/Open Space to Medium Low Density Residential/Open Space, as well as an amendment to the text of the Sand Creek Focus Area of the General Plan in order to add the option of non-age-restricted or senior residential on small lots.

Master Development Plan/Rezone/Development Agreement

The proposed project would require approval of a Rezone to change the zoning designation of the site from Study District (S) to Planned Development District (PD), subject to a Master Development Plan. The Master Development Plan and PD district would list the development standards applicable to the project site, including setbacks, lot sizes and building heights.

The Draft EIR evaluates in detail the physical environmental impacts of the proposed project, including the proposed changes to the land use and zoning designations of the project site.

Response to Comment 2-3

All development projects located within the Sand Creek Focus Area require approval of a Master Development Plan and rezoning to the PD District. Accordingly, the proposed Rezone to PD would include approval of a Master Development Plan specific to the proposed project, which is limited to the development of 220 single-family residential units. In addition, the proposed project would require approval of the Vesting Tentative Subdivision Map, which specifies the number of residential lots and parcels for associated improvements. If the development plans for the site were to change, preparation and approval of an updated Master Development Plan and Tentative Subdivision Map would be required. In other words, if site plans were changed to include development at the maximum density of 6.0 dwelling units per acre, as suggested in the comment, a new Master Development Plan would be required and would be subject to subsequent CEQA review and City approval. The Draft EIR appropriately analyzed the project as proposed and described in the Project Description chapter of the EIR.

Response to Comment 2-4

See Response to Comment 2-3 above. As stated on page 76, within Section IX, Hazards and Hazardous Materials, of the Initial Study prepared for the proposed project, which was included in Appendix A to the Draft EIR, a Phase I Environmental Site Assessment (ESA) was prepared for the purpose of identifying potential recognized environmental conditions (RECs) associated with the project site. Page 76 of the Initial Study includes the following detailed discussion:



While not considered RECs, the Phase I ESA noted that the site includes a total of four abandoned oil/gas wells within the project site, the locations of which are shown in Figure 10 [of the Initial Study]. An additional 13 wells are located on adjacent parcels to the north, south, and west of the project site. The wells identified on the project site and adjacent parcels were drilled from 1962 through 1987 and have since been plugged and abandoned. ENGEO, Inc. has indicated the potential for subsurface impacts associated with well improvements from condensate tanks, compressor units, and drilling sumps. In addition, the site previously contained multiple oil/gas pipelines. While the Phase I ESA notes that such pipelines are believed to have been removed from the project site, the potential exists for remnants of the pipelines to be encountered during project construction.

It should be noted that the project applicant has submitted an application for a new oil/gas well on the project site. Installation and operation of the oil/gas well on the project site would be conducted in compliance with all applicable regulations, including California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) guidelines and recommendations for setback, casing height, and measures for venting systems. Compliance with such would ensure that the new oil/gas well would not create a significant hazard to the public or the environment through upset or accident conditions.

Accordingly, the Initial Study concludes on page 78 that, based on the potential for ground-disturbing activities associated with the proposed project to encounter oil/gas pipelines from former petroleum extraction operations on the project site, Mitigation Measures IX-1 and IX-2 are required in order to ensure that future inhabited structures would not be located over any abandoned wells, and that any remnant pipelines be properly abandoned or removed in accordance with applicable standards. Implementation of all mitigation measures presented in the Initial Study are required, and are included in the Mitigation Monitoring and Reporting Program for the proposed project.

Response to Comment 2-5

As shown in Figure 3-2, Project Location, on page 3-3 of the Draft EIR, the project site is surrounded by currently vacant land that is proposed for residential development. Proposed nearby development projects include Albers Ranch to the west, Aviano to the northwest, The Ranch further northwest, Promenade/Vineyards at Sand Creek to the north, and Bridle Gate to the east.

In response to the comment, page 4.1-10 of the Draft EIR has been revised as follows:

The nearest sensitive receptors would be the single-family residences currently under construction as part of the Promenade/Vineyards at Sand Creek Project approximately 150 feet north of the project site, across Sand Creek. Other planned development in the area, including Albers Ranch to the west, Aviano to the northwest, The Ranch further northwest, and Bridle Gate to the east, would include residential uses as well, which would be considered sensitive receptors.

In addition, page 4.1-39 of the Draft EIR has been revised as follows:

The nearest sensitive receptors to the project site ~~are~~ would be the planned residences that are currently under construction as part of the Promenade/Vineyards at Sand Creek Project approximately 150 feet north of the project site, across Sand Creek. Other planned sensitive receptors include the residences proposed under the Albers Ranch Project, Aviano Project, The Ranch Project, and Bridle Gate Project, all of which are located farther from the portion of the project site that would be disturbed during construction of the



proposed project as compared to the Promenade/Vineyards at Sand Creek Project. In addition to being located farther from the project site than the Promenade/Vineyards at Sand Creek Project, only the Aviano Project has all necessary approvals to begin construction and, thus, could have the potential to be inhabited prior to initiation of construction associated with the proposed project. The ultimate timing of construction and habitation of the remaining projects in the vicinity of the project site remain uncertain as project approvals and/or completed applications are still required. For example, the Bridle Gate Project and the Albers Ranch Project are still in the approval process and, thus, timing of occupancy is unknown at this time. As a result, the potential for sensitive receptors to occupy the Bridle Gate Project and the Albers Ranch Project sites during construction of the proposed project is too uncertain for a quantitative analysis.

Although the future Promenade/Vineyards at Sand Creek receptors are located in relatively close proximity to the project site boundary, the overall project site is approximately 158 acres, and only approximately 72 acres would ultimately be disturbed by development. Considering the large development area, off-road construction equipment would operate at various locations throughout the project site intermittently. For instance, construction equipment operating within the southern portions of the site would be between 2,200 and 2,900 feet away from the nearest receptors. Operation of construction equipment at varying distances from the nearest sensitive receptors would allow for dispersal of DPM, which would reduce the exposure of nearby receptors. Considering the nearest sensitive receptors would be future residents at the Promenade/Vineyards at Sand Creek, all other future receptors associated with regional planned projects (i.e., the Albers Ranch Project, Aviano Project, The Ranch Project, and Bridle Gate Project) would be exposed to even lower concentrations of DPM.

As noted in the revisions to text presented above, other nearby planned development that would include sensitive receptors would be exposed to lower construction emissions concentrations than what would occur at the future residences of the Promenade/Vineyards at Sand Creek Project. Thus, the analysis within the Draft EIR, which specifically addresses the Promenade/Vineyards at Sand Creek Project, presents the worst-case scenario. Nonetheless, changes have been made to the Draft EIR text as presented above in response to the comment. The conclusions of the Draft EIR remain valid and unchanged.

Response to Comment 2-6

Impact 4.1-1 of the Draft EIR discusses air quality impacts from temporary construction-related emissions. Page 4.1-30 explains how Mitigation Measure 4.1-1 will address specific criteria pollutants, as demonstrated below:

The primary source of construction-related NO_x emissions is from off-road construction equipment. Therefore, implementation of Mitigation Measure 4.1-1, which requires the use of some higher-tier off-road equipment, would substantially reduce the emissions of NO_x.

Page 4.1-32 specifically states the following regarding which criteria pollutant would exceed the threshold of significance:

As presented in Table 4.1-7, implementation of the proposed project would result in construction-related emissions of ROG, PM₁₀, and PM_{2.5} below the applicable thresholds of significance. However, construction-related emissions of NO_x would slightly exceed the BAAQMD threshold of significance.



As shown above, the Draft EIR notes that NO_x is the criteria pollutant for which the proposed project would result in potentially significant impacts during project construction.

The following excerpt, from page 4.1-45 of the Draft EIR, explains the connection between the adopted criteria pollutant thresholds and compliance with the applicable air quality plan.

The BAAQMD's thresholds of significance were established with consideration given to the health-based air quality standards established by the AAQS, and are designed to aid the district in implementing the applicable attainment plans to achieve attainment of the AAQS. Thus, if a project's criteria pollutant emissions exceed the BAAQMD's emission thresholds of significance, a project would be considered to conflict with or obstruct implementation of the BAAQMD's air quality planning efforts, thereby delaying attainment of the AAQS.

Because construction would result in unmitigated emissions of NO_x in excess of the BAAQMD's thresholds of significance, the project would be considered to conflict with the applicable air quality plan. However, implementation of Mitigation Measure 4.1-1 would fully address this potential impact, and reduce construction-related emissions of NO_x to a less-than-significant level. Because implementation of Mitigation Measure 4.1-1 would reduce construction-related emissions of NO_x to below the BAAQMD's adopted threshold of significance, the project is considered consistent with the air quality plans.

Response to Comment 2-7

Area source emissions, as defined on page 4.1-33 of the Draft EIR, include, "natural gas combustion from heating mechanisms, landscape maintenance equipment exhaust, hearths within proposed residences, and consumer products (e.g., deodorants, cleaning products, spray paint, etc.)." As presented in Table 4.1-9 of the Draft EIR, area source emissions are the primary contributor of total ROG emissions associated with operations of the proposed project. According to the CalEEMod modeling results for the proposed project, as specifically shown on page 149 of Appendix C to the Draft EIR, 227.99 lbs/day of the total area source ROG emissions are associated with wood-burning hearths/fireplaces. As such, implementation of Mitigation Measure 4.1-2, which prohibits wood-burning fireplaces and requires that all future fireplaces be natural gas only, substantially reduces the area source emissions of ROG, as shown in Table 4.1-11 of the Draft EIR (see page 317 of Appendix C).

In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. The thresholds of significance presented in Table 4.1-6 on page 4.1-26 of the Draft EIR represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the San Francisco Bay Area Air Basin (SFBAAB) existing air quality conditions. If a project exceeds the significance thresholds presented in Table 4.1-6, the proposed project's emissions would be cumulatively considerable, resulting in significant adverse cumulative air quality impacts to the region's existing air quality conditions. As concluded on page 4.1-44 of the Draft EIR, the proposed project's operational cumulative emissions would be below BAAQMD's applicable thresholds of significance. Implementation of Mitigation Measure 4.1-2 would result in reductions in operational emissions associated with implementation of the project, and would bring the operational emissions further below BAAQMD's thresholds.



Response to Comment 2-8

The Draft EIR does not conclude that a cumulatively considerable and significant and unavoidable impact would occur for any of the impact statements related to air quality. The significant and unavoidable impact presented on page 4.1-55 of the Draft EIR, as cited in the comment, is related to GHG emissions.

A detailed description of Impact 4.1-6 after implementation of Mitigation Measure 4.1-6 is presented on page 4.1-55 of the Draft EIR:

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce GHG emissions from operation of the proposed project. The overarching goals of AB 32, SB 32, the 2017 Scoping Plan, and the Plan Bay Area 2040 is to reduce statewide GHG emissions. Therefore, the project as proposed does not include measures sufficient to ensure adequate emissions reductions, but the mitigation measure presented below would require the project to incorporate design features to reduce GHG emissions to the maximum extent feasible. Consequently, with implementation of the following mitigation measures, the project's incremental contribution to the cumulatively significant effects of GHG emissions and global climate change would be reduced, but cannot be quantified with certainty at this point, and, therefore, would remain *cumulatively considerable and significant and unavoidable*.

The GHG Reduction Plan required per Mitigation Measure 4.1-6 would be prepared and implemented by the project proponent to the satisfaction of the City, prior to issuance of a building permit for the proposed project. The City is responsible for determining whether the measures incorporated and implemented are adequate and for ensuring that the measures are carried out. As noted above, implementation of Mitigation Measure 4.1-6 would reduce GHG emissions but, because the emission reductions cannot be quantified at this time, the impact was determined to remain significant and unavoidable.

Response to Comment 2-9

The Draft EIR includes a detailed analysis of the proposed project's potential effects related to traffic, both during construction and operations, in Chapter 4.2, Transportation. Potential impacts related to transportation during construction are addressed under Impact 4.2-1. The proposed project's potential to result in traffic impacts or conflicts to nearby intersections are addressed under Impacts 4.2-2, 4.2-5, and 4.2-12. The proposed project's potential to result in traffic impacts or conflicts to nearby roadway segments are addressed under Impacts 4.2-3, 4.2-6, and 4.2-13. The commenter does not provide any specifics as to the deficiencies in the analysis.

Response to Comment 2-10

The following excerpt from page 4.2-37 of the Draft EIR explains why age-restricted residences would result in lower VMT than non-age-restricted residences:

In the event that all or a portion of the proposed residences are age-restricted as senior residences, the absolute level of VMT would be less than an unrestricted single-family home development, as senior residences include fewer persons per household than non-age-restricted homes. Additionally, the VMT on a per resident basis could be less from an age-restricted home, as residents would tend to have fewer work-related trips over time than in a non-age-restricted development community.



Considering the above, Impact 4.2-8 of the Draft EIR analyzed the proposed project with non-age-restricted residences only in order to provide a worst-case scenario analysis. Based on the approach to analysis taken in Impact 4.2-8, the Draft EIR concludes that a significant and unavoidable impact would occur related to VMT. Project alternatives are addressed in detail in Chapter 6 of the Draft EIR, which included a Senior Housing Alternative. Pursuant to CEQA Guidelines Section 15126.6(d), an EIR is only required to include sufficient detail about each alternative to allow for a comparative analysis. Therefore, a full VMT analysis for the Senior Housing Alternative is not warranted.

Response to Comment 2-11

The Draft EIR and the Transportation Impact Analysis, which is included as Appendix D to the Draft EIR, note that emergency access to the site would be primarily provided by the existing 44-foot-wide bridge from Hillcrest Avenue, and additional access would be provided by a new 20-foot-wide pedestrian bridge over Sand Creek.

Page 3-9 of the Draft EIR is hereby clarified as follows:

Vehicular ingress and egress to the proposed project would be provided from Hillcrest Avenue by way of a centrally located main entry, and an emergency vehicle access (EVA)/secondary entry intersection to the south. In addition, a clear span EVA/pedestrian bridge would ~~may~~ be constructed adjacent to the existing PG&E bridge spanning Sand Creek in the northeastern portion of the project site, ~~subject to final negotiations with PG&E and final utility designs.~~ The Hillcrest Avenue extension would include sidewalk and landscaping on the east side of the roadway. The Hillcrest Avenue bridge over Sand Creek would be constructed in the ultimate width to facilitate two southbound and two northbound lanes. Right-of-way improvements would be limited to the necessary roadway width, utilities, and pedestrian facilities within the area of the Sand Creek crossing.

Phase I of the proposed project would include construction of approximately 1,500 lineal feet of Hillcrest Avenue in a two-lane undivided roadway configuration from south of the future Sand Creek Road right-of-way to the main entry and all necessary turning lanes at intersections, as well as right-of-way for the ultimate four-lane configuration. Phase I would also include construction of the main entry and the ~~potential~~ EVA/pedestrian bridge.

In addition, page 3-12 is hereby revised as follows:

Parcels B and C, located in the northeastern portion of the site are anticipated to include a children's play area, picnic areas, a community pool, and a passive play area; however, the ultimate programming of the parks would be dictated by the City of Antioch Parks and Recreation Commission. As noted previously, the proposed project ~~may~~ would include construction of a new EVA/pedestrian bridge within Parcel C, which includes an existing PG&E-owned bridge over Sand Creek. The project would include a new private pedestrian trail connection extending from the proposed residential neighborhood across either the new bridge or the existing PG&E bridge to connect to the public Sand Creek Trail included in the planned Promenade/Vineyards at Sand Creek development to the north of the site.

Page 4.2-20 is hereby revised as follows:

Vehicular ingress and egress to the proposed project would be provided from Hillcrest Avenue by way of a centrally located main entry, and an emergency vehicle access (EVA)/secondary entry intersection to the south. In addition, a clear span EVA/pedestrian bridge ~~may~~ would be constructed adjacent to the existing PG&E bridge spanning Sand



Creek in the northeastern portion of the project site, ~~subject to final negotiations with PG&E and final utility designs.~~ The Hillcrest Avenue extension would include sidewalk and landscaping on the east side of the roadway. The Hillcrest Avenue bridge over Sand Creek would be constructed in the ultimate width to facilitate two southbound and two northbound lanes.

Page 4.2-39 is hereby revised as follows:

Phase I of the proposed project would include construction of approximately 1,500 lineal feet of Hillcrest Avenue in a two-lane undivided roadway configuration from south of the future Sand Creek Road right-of-way to the main entry and all necessary turning lanes at intersections, as well as right-of-way for the ultimate four-lane configuration. Phase I would also include construction of the main entry and the ~~potential~~ EVA/pedestrian bridge. Phase II of the proposed project would include construction of approximately 1,000 additional lineal feet of Hillcrest Avenue in a two-lane undivided roadway configuration from south of the main entry to the southerly EVA/secondary entry intersection.

Page 4.2-41 is hereby revised as follows:

Primary emergency access to the project site would be from Hillcrest Avenue to the north by way a single 44-foot-wide bridge in the existing and near-term condition. In addition, an EVA would be provided in the northeast portion of the site, ~~either by way of the existing PG&E bridge spanning Sand Creek, or through a new clear span EVA/pedestrian bridge that would be constructed adjacent to the existing PG&E bridge. The existing PG&E bridge may be used for emergency access as well,~~ subject to final negotiations with PG&E ~~and final utility designs.~~ Emergency vehicle access could also be provided through the pending Albers Ranch development project.

As noted above, the new EVA bridge would be constructed adjacent to the existing PG&E bridge during Phase I of project construction. Because the EVA bridge would be built as part of the proposed project, the EVA bridge can be considered as an emergency access route.

Response to Comment 2-12

See Response to Comment 2-8. Section 15126.4(B) of the CEQA Guidelines states the following regarding mitigation requirements:

- (B) Where several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. Formulation of mitigation measures shall not be deferred until some future time. The specific details of a mitigation measure, however, may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will be considered, analyzed, and potentially incorporated in the mitigation measure. Compliance with a regulatory permit or other similar process may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards.

As presented on page 4.1-55 of the Draft EIR, Mitigation Measure 4.1-6 requires the applicant to prepare a "GHG Reduction Plan to quantifiably reduce GHG emissions so that the project will not



cause a net increase in GHG emissions.” Accordingly, a specific performance standard is included in Mitigation Measure 4.1-6. Further, the measure identifies a number of examples of reasonable means to achieve compliance with the stated performance standard. While the ultimate effectiveness of the examples included in the mitigation measure to reduce GHG emissions to below the stated performance standard is uncertain at this time, the implementation of a GHG Reduction Plan is feasible, and the City and applicant are committed to such implementation, as required in Mitigation Measure 4.1-6 of the Draft EIR. Moreover, sufficient evidence exists that the examples included in the mitigation measure are effective for reducing GHG emissions.

Because Mitigation Measure 4.1-6 includes a specific, enforceable performance standard and identifies potential actions necessary to achieve the standard, Mitigation Measure 4.1-6 meets the requirements of Section 15126.4(B) of the CEQA Guidelines, and the EIR does not inappropriately defer mitigation.

Response to Comment 2-13

As discussed in detail in Chapter 5, Statutorily Required Sections, and as stated on page 5-5 of the Draft EIR:

[...], there are two approaches to identifying cumulative projects and their associated impacts. The “list” approach identifies individual projects known to be occurring or proposed in the surrounding area in order to identify potential cumulative impacts. The “projection” approach uses a summary of projections in adopted General Plans or related planning documents to identify potential cumulative impacts. This EIR uses the projection approach for the cumulative analysis and considers the development anticipated to occur upon buildout of the City of Antioch General Plan, as well as other reasonably foreseeable projects within the project region.

Limited situations exist where the geographic setting differs for the various resource areas. For example, the cumulative geographic setting for air quality is the San Francisco Bay Area Air Basin (SFBAAB), which is the air basin that the proposed project is located within. Global climate change is, by nature, a cumulative impact. [...]

While the same growth trends and nearby planned projects in Antioch and Brentwood were considered throughout the Draft EIR, as explained in Response to Comment 2-5, the timing of implementation of many nearby projects is considered uncertain and/or the specific mention of a particular nearby project was not relevant to a certain portion of the analysis presented within the Draft EIR. Nonetheless, in response to the comment, page 4.1-43 is hereby revised as follows:

Cumulative Construction Emissions from the Proposed Project

Construction activities result in one-time, relatively short-term emissions, and typically are not considered to contribute to cumulative emissions. However, when several large-scale construction projects occur within the same timeframe and within the same geographic region, the construction emissions may contribute to a cumulative impact. The City of Antioch is currently processing applications for several development projects in the vicinity of the project site, including the Promenade/Vineyards at Sand Creek Project, Albers Ranch Project, Aviano Project, The Ranch Project, and the Albers Ranch Bridle Gate Project. The Ranch Project was approved in July of 2020, but will require additional entitlements, such as tentative maps, in the future from the City of Antioch. The proposed developments in the vicinity of the project site would include development of low- and medium-density residences, public facilities, commercial and retail buildings, public parks, and open space areas.



~~The Albers Ranch Project site is located adjacent to the western edge of the Creekside/Vineyards at Sand Creek project site while the Ranch Project site is located on property to the northwest of the Creekside/Vineyards at Sand Creek project site. Construction of the aforementioned development projects The Ranch Project, the Albers Ranch Project, and the proposed project could potentially overlap if all three of the pending projects were approved and construction on the previously approved projects (Promenade/Vineyards at Sand Creek and Aviano) continues simultaneously with the other projects.~~ The Ranch Project, however, will require additional entitlements, such as tentative maps, in the future from the City of Antioch. The Bridle Gate Project is also still in the approval process. Additionally, the Albers Ranch Project has not yet undergone CEQA review and would require independent discretionary approval subsequent to review under CEQA.

~~Both the proposed project and The Ranch Project~~ Several of the projects assume that construction would begin immediately following approval, and would continue without interruptions until buildout of each project. In practice, construction may not occur as soon as the projects are approved, and the phasing may be temporally separated. Thus, the possibility exists that construction periods for each project may overlap for some phases, and occur separately during others. The construction schedule for the Albers Ranch Project has not yet been determined; as a result, the timing of implementation of the Albers Ranch Project is speculative. Therefore, the potential for construction of each project to overlap is speculative and too uncertain for a quantitative analysis. Per Section 15145 of the CEQA Guidelines, CEQA does not require evaluation of speculative impacts, and, given the above, the potential overlap of the construction periods is considered speculative.

Furthermore, ~~both all of the planned nearby developments have either been demonstrated to result in emissions below the BAAQMD's thresholds of significance without the need for mitigation or the environmental documents prepared for the~~ projects include mitigation measures to reduce construction-related emissions below the BAAQMD's thresholds of significance.³⁰ Therefore, each individual project would independently fall below the applicable thresholds and, consistent with BAAQMD's guidance, would be considered to have a less than significant contribution to the emissions of criteria pollutants during construction.

Ultimately, overlap of the construction of ~~both all proposed nearby~~ projects could contribute to the cumulatively significant impacts related to air quality in the SFBAAB. However, because emissions related to construction of the proposed project are below thresholds, the project's incremental contribution to this cumulatively significant impact is less than cumulatively considerable.

CEQA Guidelines, Section 15064, Subdivision (h)(5) states, "[...] the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Therefore, even where cumulative impacts are significant, any level of incremental contribution is not necessarily deemed cumulatively considerable. In accordance with CEQA Guidelines Section 15064, although the cumulative construction emissions associated with all other planned developments in conjunction with the proposed project may result in a cumulatively considerable impact, the incremental contribution of construction-related emissions from the proposed project would not exceed local emissions standards and would not be considered significant.

With regard to the cumulative transportation analysis, page 4.2-25 of the Draft EIR includes the following discussion:



To assess future growth with planned development in the East County Area, several sources of data were reviewed as part of the TIA, including the CCTA Travel Demand Model, future traffic projections as documented in the administrative draft Antioch Transportation Impact Fee, future projections from the City of Brentwood Priority Area 1 Specific Plan EIR (June 2018), and projections developed as part of the Aviano and Promenade/Vineyards at Sand Creek transportation impact studies. Traffic forecasts within the immediate study area were reviewed to ensure that known developments were adequately reflected in the forecasts, such as the Bridle Gate project located on the north and south side of the proposed Sand Creek extensions, west of SR 4, and development of the Albers Ranch project, west of the project site.

Specific inclusion of projects such as development of the Priority Area 1 in the City of Brentwood were considered for inclusion in the cumulative analysis presented in Chapter 4.1 of the Draft EIR. However, Priority Area 1 within the City of Brentwood is distant from the project site, and emissions from Priority Area 1 would not act cumulatively with other projects in the immediate vicinity of the project site to affect sensitive receptors. The certified EIR prepared for Priority Area 1 concluded that implementation of Priority Area 1 would not result in impacts related to air quality;¹ similar to the discussion of nearby projects within the City of Antioch's jurisdiction, the conclusions within the certified EIR demonstrate that Priority Area 1 would not result in a significant incremental contribution to cumulative air quality impacts. Thus, while traffic from Priority Area 1 may use the same street network as the proposed project and consideration of cumulative impacts from development of Priority Area 1 were important for Chapter 4.2 of the Draft EIR, because Priority Area 1 would not result in impacts related to air quality, either on a project- or cumulative-level, Priority Area 1 was not considered relevant for the analysis of air quality impacts presented in Chapter 4.1 of the Draft EIR.

The inclusion of the Vineyards at Deer Creek Project, specifically, in the transportation analysis is discussed on page 4.2-26 of the Draft EIR as follows:

However, as the roadway connection is shown in the City of Brentwood and City of Antioch Circulation Elements, and development is assumed on the Vineyards at Deer Creek site within the City of Brentwood General Plan, development of the Vineyards at Deer Creek project was considered as part of the background cumulative condition in order to provide a conservative worst-case assessment of future conditions. Excluding the Vineyards at Deer Creek project and associated roadway improvements would not change the overall conclusions of the TIA, or change the project mitigation requirements in the Cumulative With Project condition.

Inclusion of the Vineyards at Deer Creek Project was considered for the air quality analysis presented within Chapter 4.1 of the Draft EIR in a similar manner as was Priority Area 1. However, considering the rejection of the project by voters in the City of Brentwood, as well as the comparatively greater distance between the Vineyards at Deer Creek Project and the project site, implementation of the Vineyards at Deer Creek Project was considered speculative and anticipated emissions related to the construction or operations of the Vineyards at Deer Creek Project could not be determined with a high enough degree of certainty to be included in the Draft EIR. Moreover, inclusion of the Vineyards at Deer Creek Project in the cumulative analysis presented in Chapter 4.1 of the Draft EIR would not change the conclusions of the air quality or GHG emissions analysis or the mitigation measures presented in Chapter 4.1 of the Draft EIR.

¹ City of Brentwood. *Final Environmental Impact Report for the Priority Area 1 specific Plan (SCH 2018042064)*. August 2018.



Response to Comment 2-14

As presented on page 5-4 of the Draft EIR, Section 15130(b)(1) of CEQA Guidelines states the following regarding the required elements of a cumulative effects discussion:

- (1) Either (a) a list of past, present and probable future projects, including, if necessary, those outside the agency's control, or (b) a summary of projections contained in an adopted general plan or related planning document, or in a prior certified EIR, which described or evaluated regional or area-wide conditions contributing to the cumulative impact, provide that such documents are reference and made available for public inspection at a specified location;

As such, CEQA allows for the cumulative analysis to be based on buildout pursuant to the General Plan, as the General Plan is an adopted planning document with a prior certified EIR that describes and evaluates regional conditions contributing to the cumulative impact that is available to the public for review. With respect to any future development that may deviate from the General Plan, such future development would be subject to separate environmental review and discretionary approval by the City, similar to the proposed project. To the extent there may be such a future application is speculative. Any future actions on the part of landowners are too speculative to be considered in the EIR. Per Section 15145 of the CEQA Guidelines, CEQA does not require evaluation of speculative impacts.

In addition, the Sand Creek Focus Area specifically includes a buildout assumption of 4,000 units. Based on all of the submitted applications for projects within the Sand Creek Focus Area, evidence does not exist to suggest that the total buildout would exceed 4,000 units.

Response to Comment 2-15

The foregoing revisions are for clarification purposes only and do not represent significant new information has not been added to the Draft EIR. Thus, per Section 15088.5 of CEQA Guidelines, recirculation of the Draft EIR is not required.



3. Revisions to the Draft EIR Text

3. REVISIONS TO THE DRAFT EIR TEXT

3.1 INTRODUCTION

The Revisions to the Draft EIR Text chapter provides all corrections, additions, and revisions made to the Draft EIR. The changes represent minor clarifications and amplifications of the analysis contained in the Draft EIR and do not constitute significant new information that, in accordance with CEQA Guidelines Section 15088.5, would trigger the need to recirculate portions or all of the Draft EIR. Please refer to the discussion of this topic provided in Section 1.6 of Chapter 1, Introduction and List of Commenters, of this Final EIR.

3.2 DESCRIPTION OF CHANGES

New text is double underlined and deleted text is ~~struck through~~. Text changes are presented in the page order in which they appear in the Draft EIR.

2 Executive Summary

For clarification purposes, Table 2-1 beginning on page 2-7 of Chapter 2, Executive Summary, of the Draft EIR is hereby revised to reflect changes made to Mitigation Measure IX-1 within the Initial Study prepared for the proposed project as a result of an updated agency name (i.e., the previously named Division of Oil, Gas, and Geothermal Resources has updated their name to the Geological Energy Management Division. Rather than include the entirety of Table 2-1 with revisions shown where appropriate, only the impact for which mitigation has been revised is presented on the following page. The revisions are for clarification purposes only and do not change the conclusions of the Draft EIR.

3 Project Description

Page 3-9 of the Draft EIR is hereby clarified as follows:

Vehicular ingress and egress to the proposed project would be provided from Hillcrest Avenue by way of a centrally located main entry, and an emergency vehicle access (EVA)/secondary entry intersection to the south. In addition, a clear span EVA/pedestrian bridge would ~~may~~ be constructed adjacent to the existing PG&E bridge spanning Sand Creek in the northeastern portion of the project site, ~~subject to final negotiations with PG&E and final utility designs~~. The Hillcrest Avenue extension would include sidewalk and landscaping on the east side of the roadway. The Hillcrest Avenue bridge over Sand Creek would be constructed in the ultimate width to facilitate two southbound and two northbound lanes. Right-of-way improvements would be limited to the necessary roadway width, utilities, and pedestrian facilities within the area of the Sand Creek crossing.

Phase I of the proposed project would include construction of approximately 1,500 lineal feet of Hillcrest Avenue in a two-lane undivided roadway configuration from south of the future Sand Creek Road right-of-way to the main entry and all necessary turning lanes at intersections, as well as right-of-way for the ultimate four-lane configuration. Phase I would also include construction of the main entry and the ~~potential~~ EVA/pedestrian bridge.

The foregoing revisions are for clarification purposes and do not affect the conclusions or adequacy of the analysis presented in the Draft EIR.



**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>IX-b Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?</p>	<p>S</p>	<p>IX-1 Prior to final map approval, the project applicant shall submit to the City of Antioch Engineering Department, for review and approval, plans which show that future inhabited structures will not be located over the four on-site abandoned oil/gas wells. The plans shall be completed in compliance with the <u>Geological Energy Management Division Division of Oil, Gas, and Geothermal Resources (CalGEM DOGGR)</u> Construction Site Review Program, which includes guidelines and recommendations for setbacks and mitigation measures for venting systems. If grading is proposed proximate to the four abandoned well locations, <u>CalGEM-DOGGR</u> shall be consulted to determine if the wells will require modification in casing height. In addition, <u>CalGEM-DOGGR</u> shall be consulted to determine if the well abandonment procedures are consistent with current requirements.</p>	<p>LS</p>



Page 3-12 of the Draft EIR is hereby revised as follows:

Parcels B and C, located in the northeastern portion of the site are anticipated to include a children's play area, picnic areas, a community pool, and a passive play area; however, the ultimate programming of the parks would be dictated by the City of Antioch Parks and Recreation Commission. As noted previously, the proposed project ~~may~~ would include construction of a new EVA/pedestrian bridge within Parcel C, which includes an existing PG&E-owned bridge over Sand Creek. The project would include a new private pedestrian trail connection extending from the proposed residential neighborhood across either the new bridge or the existing PG&E bridge to connect to the public Sand Creek Trail included in the planned Promenade/Vineyards at Sand Creek development to the north of the site.

The foregoing revisions are for clarification purposes and do not affect the conclusions or adequacy of the analysis presented in the Draft EIR.

4.1 Air Quality and Greenhouse Gas Emissions

Page 4.1-10 of the Draft EIR has been revised as follows:

The nearest sensitive receptors would be the single-family residences currently under construction as part of the Promenade/Vineyards at Sand Creek Project approximately 150 feet north of the project site, across Sand Creek. Other planned development in the area, including Albers Ranch to the west, Aviano to the northwest, The Ranch further northwest, and Bridle Gate to the east, would include residential uses as well, which would be considered sensitive receptors.

The foregoing revisions are for clarification purposes and do not affect the conclusions or adequacy of the analysis presented in the Draft EIR.

Page 4.1-39 of the Draft EIR has been revised as follows:

The nearest sensitive receptors to the project site ~~are~~ would be the planned residences that are currently under construction as part of the Promenade/Vineyards at Sand Creek Project approximately 150 feet north of the project site, across Sand Creek. Other planned sensitive receptors include the residences proposed under the Albers Ranch Project, Aviano Project, The Ranch Project, and Bridle Gate Project, all of which are located farther from the portion of the project site that would be disturbed during construction of the proposed project as compared to the Promenade/Vineyards at Sand Creek Project. In addition to being located farther from the project site than the Promenade/Vineyards at Sand Creek Project, only the Aviano Project has all necessary approvals to begin construction and, thus, could have the potential to be inhabited prior to initiation of construction associated with the proposed project. The ultimate timing of construction and habitation of the remaining projects in the vicinity of the project site remain uncertain as project approvals and/or completed applications are still required. For example, the Bridle Gate Project and the Albers Ranch Project are still in the approval process and, thus, timing of occupancy is unknown at this time. As a result, the potential for sensitive receptors to occupy the Bridle Gate Project and the Albers Ranch Project sites during construction of the proposed project is too uncertain for a quantitative analysis.

Although the future Promenade/Vineyards at Sand Creek receptors are located in relatively close proximity to the project site boundary, the overall project site is approximately 158 acres, and only approximately 72 acres would ultimately be disturbed by development. Considering the large development area, off-road construction equipment would operate at various locations throughout the project site intermittently. For instance, construction



equipment operating within the southern portions of the site would be between 2,200 and 2,900 feet away from the nearest receptors. Operation of construction equipment at varying distances from the nearest sensitive receptors would allow for dispersal of DPM, which would reduce the exposure of nearby receptors. Considering the nearest sensitive receptors would be future residents at the Promenade/Vineyards at Sand Creek, all other future receptors associated with regional planned projects (i.e., the Albers Ranch Project, Aviano Project, The Ranch Project, and Bridle Gate Project) would be exposed to even lower concentrations of DPM.

The foregoing revisions are for clarification purposes and do not affect the conclusions or adequacy of the analysis presented in the Draft EIR.

Page 4.1-43 of the Draft EIR is hereby revised as follows:

Cumulative Construction Emissions from the Proposed Project

Construction activities result in one-time, relatively short-term emissions, and typically are not considered to contribute to cumulative emissions. However, when several large-scale construction projects occur within the same timeframe and within the same geographic region, the construction emissions may contribute to a cumulative impact. The City of Antioch is currently processing applications for several development projects in the vicinity of the project site, including the Promenade/Vineyards at Sand Creek Project, Albers Ranch Project, Aviano Project, The Ranch Project, and the Albers Ranch Bridle Gate Project. The Ranch Project was approved in July of 2020, but will require additional entitlements, such as tentative maps, in the future from the City of Antioch. The proposed developments in the vicinity of the project site would include development of low- and medium-density residences, public facilities, commercial and retail buildings, public parks, and open space areas.

~~The Albers Ranch Project site is located adjacent to the western edge of the Creekside/Vineyards at Sand Creek project site while the Ranch Project site is located on property to the northwest of the Creekside/Vineyards at Sand Creek project site. Construction of the aforementioned development projects The Ranch Project, the Albers Ranch Project, and the proposed project could potentially overlap if all three of the pending projects were approved and construction on the previously approved projects (Promenade/Vineyards at Sand Creek and Aviano) continues simultaneously with the other projects. The Ranch Project, however, will require additional entitlements, such as tentative maps, in the future from the City of Antioch. The Bridle Gate Project is also still in the approval process. Additionally, the Albers Ranch Project has not yet undergone CEQA review and would require independent discretionary approval subsequent to review under CEQA.~~

~~Both the proposed project and The Ranch Project~~ Several of the projects assume that construction would begin immediately following approval, and would continue without interruptions until buildout of each project. In practice, construction may not occur as soon as the projects are approved, and the phasing may be temporally separated. Thus, the possibility exists that construction periods for each project may overlap for some phases, and occur separately during others. The construction schedule for the Albers Ranch Project has not yet been determined; as a result, the timing of implementation of the Albers Ranch Project is speculative. Therefore, the potential for construction of each project to overlap is speculative and too uncertain for a quantitative analysis. Per Section 15145 of the CEQA Guidelines, CEQA does not require evaluation of speculative impacts, and, given the above, the potential overlap of the construction periods is considered speculative.



Furthermore, ~~both all of the planned nearby developments have either been demonstrated to result in emissions below the BAAQMD's thresholds of significance without the need for mitigation or the environmental documents prepared for the~~ projects include mitigation measures to reduce construction-related emissions below the BAAQMD's thresholds of significance.⁴ Therefore, each individual project would independently fall below the applicable thresholds and, consistent with BAAQMD's guidance, would be considered to have a less than significant contribution to the emissions of criteria pollutants during construction.

Ultimately, overlap of the construction of ~~both all proposed nearby~~ projects could contribute to the cumulatively significant impacts related to air quality in the SFBAAB. However, because emissions related to construction of the proposed project are below thresholds, the project's incremental contribution to this cumulatively significant impact is less than cumulatively considerable.

The foregoing revisions are for clarification purposes and do not affect the conclusions or adequacy of the analysis presented in the Draft EIR.

4.2 Transportation

Page 4.2-20 of the Draft EIR is hereby revised as follows:

Vehicular ingress and egress to the proposed project would be provided from Hillcrest Avenue by way of a centrally located main entry, and an emergency vehicle access (EVA)/secondary entry intersection to the south. In addition, a clear span EVA/pedestrian bridge ~~may would~~ be constructed adjacent to the existing PG&E bridge spanning Sand Creek in the northeastern portion of the project site, ~~subject to final negotiations with PG&E and final utility designs.~~ The Hillcrest Avenue extension would include sidewalk and landscaping on the east side of the roadway. The Hillcrest Avenue bridge over Sand Creek would be constructed in the ultimate width to facilitate two southbound and two northbound lanes.

The foregoing revisions are for clarification purposes and do not affect the conclusions or adequacy of the analysis presented in the Draft EIR.

Page 4.2-39 of the Draft EIR is hereby revised as follows:

Phase I of the proposed project would include construction of approximately 1,500 lineal feet of Hillcrest Avenue in a two-lane undivided roadway configuration from south of the future Sand Creek Road right-of-way to the main entry and all necessary turning lanes at intersections, as well as right-of-way for the ultimate four-lane configuration. Phase I would also include construction of the main entry and the ~~potential~~ EVA/pedestrian bridge. Phase II of the proposed project would include construction of approximately 1,000 additional lineal feet of Hillcrest Avenue in a two-lane undivided roadway configuration from south of the main entry to the southerly EVA/secondary entry intersection.

The foregoing revisions are for clarification purposes and do not affect the conclusions or adequacy of the analysis presented in the Draft EIR.

Page 4.2-41 of the Draft EIR is hereby revised as follows:

⁴ ~~FirstCarbon Solutions. The Ranch Project Draft Environmental Impact Report. March 20, 2020.~~



Primary emergency access to the project site would be from Hillcrest Avenue to the north by way a single 44-foot-wide bridge in the existing and near-term condition. In addition, an EVA would be provided in the northeast portion of the site, ~~either by way of the existing PG&E bridge spanning Sand Creek, or through a new clear span EVA/pedestrian bridge that would be constructed adjacent to the existing PG&E bridge. The existing PG&E bridge may be used for emergency access as well,~~ subject to final negotiations with PG&E ~~and final utility designs.~~ Emergency vehicle access could also be provided through the pending Albers Ranch development project.

The foregoing revisions are for clarification purposes and do not affect the conclusions or adequacy of the analysis presented in the Draft EIR.



4. Mitigation Monitoring and Reporting Program

4. MITIGATION MONITORING AND REPORTING PROGRAM

4.1 INTRODUCTION

Section 15097 of the California Environmental Quality Act (CEQA) requires all State and local agencies to establish monitoring or reporting programs for projects approved by a public agency whenever approval involves the adoption of either a “mitigated negative declaration” or specified environmental findings related to an EIR.

The following is the Mitigation Monitoring and Reporting Program (MMRP) for the Creekside/Vineyards at Sand Creek Project (proposed project). The intent of the MMRP is to ensure implementation of the mitigation measures identified within the EIR for the Creekside/Vineyards at Sand Creek Project. Unless otherwise noted, the cost of implementing the mitigation measures as prescribed by this MMRP shall be funded by the project applicant.

4.2 COMPLIANCE CHECKLIST

The MMRP contained herein is intended to satisfy the requirements of CEQA as they relate to the EIR for the Creekside/Vineyards at Sand Creek Project prepared by the City of Antioch. This MMRP is intended to be used by City staff and mitigation monitoring personnel to ensure compliance with mitigation measures during project implementation. Mitigation measures identified in this MMRP were developed in the EIR that was prepared for the proposed project.

The Creekside/Vineyards at Sand Creek Project EIR presents a detailed set of mitigation measures that will be implemented throughout the lifetime of the project. Mitigation is defined by CEQA Guidelines, Section 15370, as a measure that:

- Avoids the impact altogether by not taking a certain action or parts of an action;
- Minimizes impacts by limiting the degree or magnitude of the action and its implementation;
- Rectifies the impact by repairing, rehabilitating, or restoring the impacted environment;
- Reduces or eliminates the impact over time by preservation and maintenance operations during the life of the project; or
- Compensates for the impact by replacing or providing substitute resources or environments.

The intent of the MMRP is to ensure the implementation of adopted mitigation measures. The MMRP will provide for monitoring of construction activities as necessary and in-the-field identification and resolution of environmental concerns.

Monitoring and documenting the implementation of mitigation measures will be coordinated by the City of Antioch. The table in Section 4.3 identifies the mitigation measure, the monitoring action for the mitigation measure, the responsible party for the monitoring action, and timing of the monitoring action. The applicant will be responsible for fully understanding and effectively implementing the mitigation measures contained within the MMRP. The City will be responsible for monitoring compliance.



4.3 MITIGATION MONITORING AND REPORTING PROGRAM

The following table indicates the mitigation measure number, the impact the measure is designed to address, the measure text, the monitoring agency, implementation schedule, and an area for sign-off indicating compliance.



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
4.1 Air Quality and Greenhouse Gas Emissions					
4.1-1	Conflict with or obstruct implementation of the applicable air quality plan during project construction.	<p>4.1-1 Prior to approval of any grading plans, the project applicant shall show on the plans via notation that the contractor shall ensure that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, shall achieve a project wide fleet average three percent NO_x reduction compared to the year 2022 California Air Resources Board (CARB) fleet average. The three percent NO_x reduction may be achieved by requiring a combination of engine Tier 3 or Tier 4 off-road construction equipment or the use of hybrid, electric, or alternatively fueled equipment. For instance, the emissions presented in Table 4.1-8 were achieved by requiring Rubber Tired Dozers and Cranes to be engine Tier 3.</p> <p>In addition, all off-road equipment operating at the construction site must be maintained in proper working condition according to manufacturer's specifications. Idling shall be limited to 5 minutes or less in accordance with the Off-Road Diesel Fueled Fleet Regulation as required by CARB. Clear signage regarding idling restrictions should be placed at the entrances to the construction site.</p> <p>Portable equipment over 50 horsepower must have either a valid District Permit to Operate</p>	City of Antioch Community Development Department	Prior to approval of grading plans and during construction	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<i>(PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.</i>			
4.1-2	Conflict with or obstruct implementation of the applicable air quality plan during project operation.	<p>4.1-2 <i>Prior to issuance of building permits for the proposed project, the project applicant shall demonstrate via project design and/or notation included on project design that only natural gas hearths (fireplaces) shall be installed in the proposed residences and wood-burning hearths shall be prohibited.</i></p> <p><i>Conformance with the foregoing requirements shall be confirmed through review and approval of building permit plans by the City of Antioch Community Development Department.</i></p>	City of Antioch Community Development Department	Prior to issuance of building permits	
4.1-6	Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, regulation adopted for the purpose of reducing the emissions of GHGs.	<p>4.1-6 <i>Prior to the issuance of building permits, the applicant shall prepare and submit to the City a GHG Reduction Plan to reduce GHG emissions to the maximum extent feasible. Proof of implementation of the GHG Reduction Plan shall be submitted to the City of Antioch Community Development Department.</i></p> <p><i>Examples of measures that may be used to reduce GHG emissions include, but are not limited to, the following:</i></p> <ul style="list-style-type: none"> • <i>Orient buildings to maximize passive solar heating;</i> • <i>Use renewable diesel to fuel construction fleets;</i> 	<p>City of Antioch Community Development Department</p> <p>Bay Area Air Quality Management District</p>	Prior to issuance of building permits	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<ul style="list-style-type: none"> • <i>Promote ridesharing, transit, bicycling, and walking for work trips through dedication of preferential parking spaces, provision of on-site bicycle parking, provision of end-of-trip facilities such as bicycle lockers and on-site showers;</i> • <i>Install electric vehicle charging infrastructure in excess of existing CBSC requirements;</i> • <i>Provide fully operational charging stations and preferential parking spots for electric vehicles;</i> • <i>Install energy star or equivalent appliances in all residences;</i> • <i>Limit installation of natural gas fueled appliances;</i> • <i>Install solar water heating;</i> • <i>Use water efficient landscapes and native/drought-tolerant vegetation;</i> • <i>Provide outdoor electrical outlets to allow for use of electrically powered landscaping equipment at all residences and park spaces within the project site;</i> • <i>Construct on-site or fund off-site carbon sequestration projects (such as tree plantings or reforestation projects); and</i> • <i>Purchase carbon credits to offset project annual emissions. Carbon offset credits shall be verified and</i> 			



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>registered with The Climate Registry, the Climate Action Reserve, or another source approved by CARB, BAAQMD, or the City of Antioch.</i></p> <p><i>If off-site mitigation measures are proposed, the applicant must be able to show that the emission reductions from identified projects are real, permanent through the duration of the project, enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site measures shall be subject to review and approval by the City of Antioch Community Development Department. BAAQMD recommends that off-site mitigation projects occur within the nine-county Bay Area in order to reduce localized impacts and capture potential co-benefits. If BAAQMD has established an off-site mitigation program at the time a development application is submitted, as an off-site mitigation measure, the applicant may choose to enter into an agreement with BAAQMD and pay into the established off-site mitigation program fund, where BAAQMD would commit to reducing the type and amount of emissions identified in the agreement.</i></p>			
4.2 Transportation					
4.2-1	Conflict with a program, plan, ordinance, or policy addressing the circulation	4.2-1 <i>Prior to issuance of grading and building permits, the project applicant shall submit a construction management plan, subject to</i>	City Engineer	Prior to issuance of grading and building permits	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
	system during construction activities.	<p><i>review and approval by the City Engineer. The requirements within the construction management plan shall include, but are not necessarily limited to, the following elements:</i></p> <ul style="list-style-type: none"> <i>• Project staging plan to maximize on-site storage of materials and equipment;</i> <i>• A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak hours; lane closure proceedings; signs, cones, and other warning devices for drivers; and designation of construction access routes;</i> <i>• Permitted construction hours;</i> <i>• Location of construction staging;</i> <i>• Identification of parking areas for construction employees, site visitors, and inspectors, including on-site locations; and</i> <i>• Provisions for street sweeping to remove construction related debris on public streets.</i> 			
4.2-7	Conflict with a program, plan, ordinance, or policy addressing study freeway segments under Near-Term With Project conditions.	<p><i>4.2-7 Prior to issuance of building permits for the proposed project, the project applicant shall pay applicable regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA). Proof of fee payment shall be submitted to the City of Antioch.</i></p>	City of Antioch Community Development Department	Prior to issuance of building permits	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
4.2-12	Conflict with a program, plan, ordinance, or policy addressing study intersections under Cumulative With Project conditions.	4.2-12(a) Prior to the issuance of the 165 th building permit, the project applicant shall modify the eastbound approach to the Lone Tree Way at Hillcrest Avenue intersection to provide two left-turn lanes, two through lanes, and a through-right-shared lane through the reconstruction of the median, restriping, and signal modifications. Details of the improvements shall be defined in the Development Agreement. The improvements shall be completed to the satisfaction of the City Engineer.	City Engineer	Prior to the issuance of the 165 th building permit	
		4.2-12(b) Prior to issuance of building permits, the project applicant shall pay applicable regional transportation impact fees to the ECCRFFA that would fund improvements at the Sand Creek Road/SR 4 eastbound ramps intersection, including construction of a slip-ramp for the eastbound Sand Creek to southbound SR 4 movement, eliminating the conflicting left-turn movement at the intersection. Proof of payment shall be submitted to the City of Antioch Community Development Department. It should be noted that the Sand Creek Road/SR 4 eastbound ramps intersection is located outside of the City of Antioch and is under the jurisdiction of Caltrans.	City of Antioch Community Development Department	Prior to issuance of building permits	
		4.2-12(c) Prior to issuance of building permits, if the required improvements are added to the ECCRFFA regional fee program, the project	City of Antioch Community	Prior to issuance of building permits	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		applicant shall pay applicable regional transportation impact fees to the ECCRFFA that would fund the improvements. Proof of payment shall be submitted to the City of Antioch Community Development Department. It should be noted that the Sand Creek Road/SR 4 westbound ramps intersection is located outside of the City of Antioch and is under the jurisdiction of Caltrans.	Development Department		
Initial Study					
IV-a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	<p><i>Special Status Plants</i></p> <p>IV-1 Prior to initiation of ground-disturbing activities on the project site and off-site improvement areas, the project proponent shall retain a qualified biologist to conduct rare plant surveys within one year of the anticipated groundbreaking for the proposed project. The surveys shall be conducted following the CDFW (2018), USFWS (2000), and CNPS (2001), or the most current published survey guidelines. During the surveys, qualified botanists shall search for all the plants identified in the Biological Resources Analysis (Monk & Associates, 2020) as having the potential to occur on the project site and off-site improvement areas, and all plants that are considered locally rare as listed in the East Bay Chapter of the CNPS Database of Rare, Unusual and Significant Plants of Alameda and Contra Costa Counties for the Marsh</p>	City of Antioch Community Development Department	Prior to initiation of ground-disturbing activities	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>Creek/Lone Tree Valley area. Project construction shall not be initiated until all special-status plant surveys are completed and the mitigation is implemented, if necessary and required prior to starting construction.</i></p> <p><i>A special-status plant survey report that includes the methods used, survey participants, and associated findings shall be prepared and submitted to the City no more than 30 days following the completion of the final site visit. A record of any special-status plant species identified within the project site during the preconstruction surveys shall be submitted to the CNDDDB. If new special-status plant populations are not found on the site during the appropriately timed surveys, additional mitigation is not required. If construction is not started within two years after the rare plant surveys are completed, the City may require additional rare plant surveys.</i></p> <p><i>If special-status plants are observed on the site during the survey, the populations shall be avoided to the maximum degree possible during project development, and a Mitigation and Monitoring Plan shall be prepared detailing the measures to be implemented to avoid the plant population. Measures shall include establishment of appropriate buffers during construction, fencing of the population prior to and during construction, and regular</i></p>			



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>monitoring of the preserved population by a biologist during and after construction activities. The Mitigation and Monitoring Plan shall be implemented prior to the initiation of project grading. If the plant populations cannot be avoided, the applicant shall hire a qualified biologist to prepare a seed collection and replanting plan in coordination with the City of Antioch to reduce impacts to the identified special-status plant populations, subject to review and approval by the City of Antioch Community Development Department.</i></p> <p><i>California Red-Legged Frog</i></p> <p>IV-2 <i>Prior to initiation of ground-disturbing activities on the project site and off-site improvement areas, the project applicant shall implement the following measures:</i></p> <ul style="list-style-type: none"> <i>An education program shall be conducted by a qualified biologist to explain the endangered species concerns to contractors/operators working at the project site. The education/training program shall include a description of California red-legged frog and its habitat, a review of the Endangered Species Act and the federal listing of the species, the general protection measures to be implemented to protect the frog and minimize take, and a delineation of the</i> 	<p>City of Antioch Community Development Department</p> <p>U.S. Fish and Wildlife Service</p>	<p>Prior to initiation of ground-disturbing activities and during construction activities</p>	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>limits of the work area. A sign-in sheet shall be distributed to all participants of the education/training program and submitted to the City of Antioch within two weeks of program completion.</i></p> <ul style="list-style-type: none"> <i>The work areas adjacent to Sand Creek shall be isolated with suitable wildlife exclusion fencing (see below) that would block the movement of California red-legged frogs from entering the work areas. The wildlife exclusion fence shall also prevent mammals migrating along Sand Creek from entering the project site. The fence shall be installed along the northern border of the project site, adjacent to the Sand Creek Buffer Area, prior to the time any site grading or vegetation removal activities are implemented. The exact location of the fencing shall be determined by a qualified biologist. The fence shall remain in place during site grading or other construction-related activities and shall prevent frogs and wildlife from entering the project site work areas. While normally California red-legged frog exclusion fencing often consists of silt fencing, owing to the duration of project construction, the project proponent may install a more weather resilient fence that is durable enough to remain in place for the</i> 			



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p>duration of construction, such as a commercially available exclusion fencing (e.g., ERTEC Fence). Fencing shall be installed by staking the route of the wildlife exclusion fencing in a 4-inch-deep trench. Then, the bottom of the fence shall be firmly seated in the trench. The project proponent may replace the wildlife exclusion fencing during construction with permanent fencing, approved by the City.</p> <ul style="list-style-type: none"> • A qualified biologist shall be onsite when grading activities occur within 300 feet of Sand Creek to conduct daily inspections of the fencing and to otherwise ensure that stranded animals are salvaged and relocated back to the stream channel. The biological monitor shall be responsible for ensuring that the wildlife exclusion fencing is not compromised and shall notify the onsite contractor representative when fencing needs to be repaired. • All construction work in Sand Creek associated with the outfall structures shall be scheduled for the dry season (May 15 through October 15) and when Sand Creek is dry or there is reduced flow in this creek. See also the permitting requirements specified in Mitigation Measure IV-14. Any necessary in-drainage work when 			



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p>there are flows shall be isolated from flows via the installation of temporary coffer dams that have flow-through bypass pipes ensuring that flows pass by the stormwater outfall work areas. Flows shall be diverted around isolated work areas either by gravity flow or, if necessary, by pumping water around the work area. No silty water shall be allowed to reenter the tributary below any in-drainage work area. Methods and materials shall be adapted in the field to match the size, shape, and anticipated flow volume of the drainage, and shall be pre-approved by the biological monitor. All divisions shall conform to the following provisions:</p> <ul style="list-style-type: none"> o A qualified 10(a)(1)(A) biologist shall conduct preconstruction surveys for California red-legged frog prior to isolating any work area within Sand Creek. If any frogs are found in the work area, the USFWS shall be notified, and if the USFWS authorizes relocation, the frogs shall be moved from the two stormwater outfall work areas, up or downstream in Sand Creek to appropriate aquatic habitats. Upon 			



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>completion of the survey, if the outfall construction areas must be dewatered, coffer dams may be installed. Any isolated water shall be dip-netted or as appropriate, seined by the biologist to search for frogs prior to pumping water out of the isolated work areas. The project biological monitor shall be present during all in-drainage work. Dewatered work areas shall not result in stranded aquatic wildlife.</i></p> <ul style="list-style-type: none"> ○ <i>Drainage diversion shall be practiced only where deemed unavoidable by the proposed project engineer and biological monitor.</i> ○ <i>Diversion shall be limited to the minimum time period necessary to complete the work and restore the channel.</i> ○ <i>Construction equipment shall work from above the top-of-bank. There shall be no vehicle passage, vehicle parking, or materials storage below the top-of-bank.</i> ○ <i>All in-drainage and diversion work plans shall reflect and incorporate standard erosion</i> 			



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>control measures and Best Management Practices (BMPs) as prescribed in the project's Stormwater Pollution and Prevention Plan (SWPPP).</i></p> <ul style="list-style-type: none"> <i>○ In certain cases where water seeps into the dewatered area, sump pits may be excavated in the work area and seepage water would then be pumped back upstream behind the coffer dam. All discharged water shall be silt free. If silt is a problem, water shall be pumped through a silt sock into baker tank(s) prior to discharge back into the channel.</i> <i>○ All downstream flows shall be maintained throughout the period that coffer dams are installed.</i> <i>○ The entire work area below the top-of-bank, including the coffer dam location, shall be restored to the approximate pre-construction contours and shall be stabilized as necessary to withstand the expected high-water flows. All dam materials shall be</i> 			



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p>completely removed from the channel when work is complete and shall not be disposed of in or near the channel.</p> <ul style="list-style-type: none"> ○ All trash that might attract predators to the project site shall be properly contained and removed from the site and disposed of regularly. All construction debris and trash shall be removed from the site when construction activities are complete. ○ All fueling and maintenance of equipment and vehicles, and staging areas shall be at least 60 feet from Sand Creek. The construction personnel shall ensure that contamination of California red-legged frog habitat does not occur and shall have a plan to promptly address any accidental spills. • To mitigate for permanent impacts to 60.7 acres of California red-legged frog dispersal habitat, the project proponent shall preserve dispersal habitat adjacent to occupied California red-legged frog habitat, or as otherwise approved by USFWS, at a minimum of a 1:1 impacts to 			



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p>replacement.¹ Protection shall be via the purchase of the mitigation land fee title or via recordation of a conservation easement over the mitigation land. Alternatively, the project proponent may purchase California red-legged frog credits at a 1:1 ratio from a USFWS-approved mitigation bank.</p> <ul style="list-style-type: none"> • If mitigation credits are not used, prior to the start of construction, the project proponent shall record a conservation easement over the mitigation property preserving it in perpetuity as wildlife habitat. The easement shall be granted to a qualified conservation organization as defined by Section 815.3 of the California Civil Code. Prior to the start of construction, the project proponent shall prepare a habitat management plan that addresses management of the mitigation land that inures to the benefit of the California red-legged frog and shall submit the plan to the City of Antioch prior to the start of construction. The project proponent shall also establish an endowment 			

¹ The 60.7 acres of permanently impacted habitat includes off-site improvement areas that overlap with the Promenade/Vineyards at Sand Creek Project. For any off-site impacted habitat for which replacement habitat has already been provided as part of the Promenade/Vineyards at Sand Creek Project, further mitigation is not required.



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>fund, or other funding mechanism to provide for the long-term management, maintenance, and monitoring of the mitigation site.</i></p> <p><i>The project proponent may satisfy the requirements of this mitigation measure by providing the City of Antioch with a copy of a biological opinion issued by the USFWS that includes these, or other functionally equivalent, habitat preservation measures prior to the start of construction.</i></p> <p><i>As an alternative to completion of MM IV-2, the project applicant could comply with one of the following conditions:</i></p> <ol style="list-style-type: none"> <i>1. Comply with the applicable terms and conditions of the ECCC HCP/NCCP, as determined in written "Conditions of Coverage" by the Conservancy, provided that the City has first entered into an agreement with the Conservancy for coverage of impacts to ECCC HCP/NCCP Covered Species; or</i> <i>2. Comply with a habitat conservation plan and/or natural community conservation plan developed and adopted by the City, including payment of applicable fees, provided that CDFW and USFWS have approved the conservation plan.</i> 			



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>California Tiger Salamander</i></p> <p>IV-3 <i>Prior to initiation of construction activities, to mitigate for the permanent impacts to 60.7 acres of potential California tiger salamander migration/over-summering habitat, the project applicant shall compensate for impacted California tiger salamander migration/over-summering habitat at a minimum of a 1:1 impacts to replacement ratio.² Mitigation land shall be permanently protected land within the Central California DPS range of the California tiger salamander within 1.3 miles of a known breeding site, or as otherwise approved by CDFW and USFWS. Protection shall be accomplished through the purchase of the mitigation land in fee title or via recordation of a conservation easement over the mitigation land. In lieu of this mitigation prior to construction, the project proponent may purchase California tiger salamander credits at a 1:1 ratio from a approved mitigation bank.</i></p> <p><i>If mitigation credits are not used, prior to the start of construction, the project proponent shall record a conservation easement over the mitigation property preserving it in perpetuity as wildlife habitat. The easement shall be granted to a qualified conservation</i></p>	<p>City of Antioch Community Development Department</p> <p>California Department of Fish and Wildlife</p> <p>U.S. Fish and Wildlife Service</p>	Prior to initiation of ground-disturbing activities and during construction activities	

² The 60.7 acres of permanently impacted habitat includes off-site improvement areas that overlap with the Promenade/Vineyards at Sand Creek Project. For any off-site impacted habitat for which replacement habitat has already been provided as part of the Promenade/Vineyards at Sand Creek Project, further mitigation is not required.



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>organization as defined by Section 815.3 of the California Civil Code. The project proponent shall prepare a habitat management plan that addresses management of the mitigation land that inures to the benefit of the California tiger salamander and shall submit the plan to the City of Antioch prior to the start of construction. The project proponent shall also establish an endowment fund, or other funding mechanism to provide for the long-term management, maintenance, and monitoring of the mitigation site.</i></p> <p><i>The project proponent may satisfy the requirements of this mitigation measure by providing the City of Antioch with a copy of a biological opinion issued by the USFWS that includes these, or other functionally equivalent, habitat preservation measures, to be implemented prior to initiation of construction activities.</i></p> <p><i>As an alternative to completion of MM IV-3, the project applicant could comply with one of the following conditions:</i></p> <ol style="list-style-type: none"> <i>1. Comply with the applicable terms and conditions of the ECCC HCP/NCCP, as determined in written "Conditions of Coverage" by the Conservancy, provided that the City has first entered into an agreement with the</i> 			



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>Conservancy for coverage of impacts to ECCC HCP/NCCP Covered Species; or</i></p> <p>2. <i>Comply with a habitat conservation plan and/or natural community conservation plan developed and adopted by the City, including payment of applicable fees, provided that CDFW and USFWS have approved the conservation plan.</i></p> <p><i>Western Pond Turtle</i></p> <p>IV-4 <i>Prior to initiation of construction activities, a qualified biologist shall conduct a preconstruction survey of the two stormwater outfall work areas in Sand Creek, and if a western pond turtle is identified in the work area, the turtle shall be relocated to suitable habitat downstream. A written summary of the survey results shall be submitted to the City of Antioch Community Development Department. The work areas adjacent to Sand Creek shall be isolated with exclusion fencing in accordance with Mitigation Measure IV-2 that shall prevent western pond turtle from entering the work site and accidentally being harmed by construction activities.</i></p> <p><i>Preconstruction surveys for turtle nest sites in uplands adjacent to suitable aquatic habitat during spring and summer months shall be conducted within 30 days prior to beginning</i></p>	<p>City of Antioch Community Development Department</p> <p>California Department of Fish and Wildlife</p>	<p>Prior to initiation of and during construction activities</p>	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p>any ground-disturbing activities. If nests are not found, further consideration for western pond turtle nests is not warranted. If nest sites are located during preconstruction surveys adjacent to a proposed work area, the nest site plus a 50-foot buffer around the nest site shall be fenced where the buffer intersects a project work area to avoid impacts to the eggs or hatchlings which over-winter at the nest site. In addition, if nest(s) are located during surveys, moth balls (naphthalene) should be sprinkled around the vicinity of the nest (no closer than 10 feet) to mask human scent and discourage predators.</p> <p>Construction at the nest site and within the 50-foot buffer area shall be delayed until the young leave the nest (this could be a period of many months) or as otherwise advised and directed by a qualified biologist. A qualified CDFW approved biologist, with the concurrence of CDFW, may also relocate young pond turtles.</p> <p>Golden Eagle</p> <p>IV-5 Prior to initiation of ground-disturbing activities or tree removal, preconstruction surveys shall be conducted by a qualified raptor biologist on the project site and within a zone of influence (determined by a qualified biologist) of all project-related activities during the golden eagle breeding season (January through</p>			
			City of Antioch Community Development Department	Prior to initiation of ground-disturbing activities or tree removal	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p>August). The zone of influence is affected by geographic barriers that affect direct line of sight from disturbance to the nest site, and/or distances that proposed activities could influence nesting behavior. The zone of influence shall be determined by a qualified raptor biologist. If nesting golden eagles are found nesting within the zone of influence, a qualified raptor biologist shall determine an appropriate buffer consistent with the USFWS' 2017 Recommended Buffer Zones for Ground-Based Human Activities Around Nesting Sites of Golden Eagles in California and Nevada. A written summary of the survey results shall be submitted to the City of Antioch Community Development Department.</p> <p>The USFWS' 2017 Recommended Buffer Zones for Ground-Based Human Activities Around Nesting Sites of Golden Eagles in California and Nevada, recommends buffer zones for active nests. Such recommended buffer zones may increase or decrease in size depending on specific site or activity circumstances and local jurisdiction recommendations. For any active nest found within a zone of influence of the project site, the qualified raptor biologist shall determine the appropriate buffer size(s) to ensure that project activities do not impact the active nest site. Buffer sizes are likely to be reduced in size when a qualified raptor biologist makes a determination that the nesting golden eagles</p>			



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>are acclimated to mechanized activities and disturbances of the like, or the nest is shielded from disturbance by geographic barriers.</i></p> <p><i>If no active nesting golden eagles are identified during survey(s), project construction may commence without further regard for protection of nesting eagles. If golden eagles are found nesting in the project vicinity after project construction has commenced, it should be assumed that the golden eagles began nesting while the project site was under construction and thus, that the eagles are habituated to the ambient level of noise and disturbance emanating from the project site.</i></p> <p><i>If active nesting golden eagles are identified during the preconstruction surveys, the qualified biologist shall establish a nest protection buffer and no project-related disturbance shall be allowed within any established nesting buffer until the young fledge the nest or the nesting attempt is otherwise complete for the year. The buffer shall remain in place until the fledglings become independent of the nesting tree. The young can be considered successfully fledged when the eaglets no longer return to the nesting tree for several consecutive nights. A qualified raptor biologist shall monitor the nesting eagles initially for a period long enough to understand the nesting eagles' response to disturbance, and thereafter on a</i></p>			



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>routine basis (at least once per week) until the nestlings successfully fledge and become independent of the nesting tree.</i></p> <p><i>It should be noted that if the developer initiates grading of the project site in the non-nesting season (September to December) and development disturbance remains continuous through the nesting season, and the golden eagles return and nest, it can be assumed that the golden eagles are sufficiently acclimated to the project disturbance. A qualified raptor biologist would be required to confirm the level of acclimation and would have to monitor the nesting attempt continuously through the nesting season to ensure that the project disturbance is not affecting the golden eagles nesting efforts and behaviors. After commencement of nesting, if the golden eagles respond negatively to the ongoing disturbance, a 600-foot buffer shall be immediately established and maintained under the supervision of the raptor biologist until the nesting cycle is completed, as determined by a qualified raptor biologist.</i></p> <p><i>Swainson's Hawk</i></p> <p><i>IV-6 Prior to any project-related ground disturbance that occurs during the nesting season (March 15th to September 15th), a qualified biologist shall conduct a preconstruction survey at least two survey</i></p>			
			City of Antioch Community Development Department	Prior to any project-related ground disturbance that occurs during the Swainson's hawk	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>periods prior to the start of construction. Surveys shall follow the protocol in the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000), including the survey period lengths identified therein. A written summary of the survey results shall be submitted to the City of Antioch Community Development Department.</i></p> <p><i>If the proposed project could result in take of the Swainson's hawk, its nest, or eggs, typically assumed to be the case if a nest is detected within a 0.25-mile of the project site, the project proponent shall prepare a Swainson's Hawk Monitoring and Habitat Management Plan. If take of Swainson's hawk eggs, nestlings, fledglings could occur from the proposed activities, as determined by a qualified raptor biologist, protective buffers shall be established on the project site that shall prevent such take from occurring. The protective buffer around the active nest site shall be maintained until such time that the Swainson's hawks have completed their nesting cycle as determined by a qualified raptor biologist. The nest protection buffer shall be coordinated with the CDFW.</i></p> <p><i>If the preconstruction surveys find Swainson's hawk nests within 0.25 mile of the project site, impacts to its foraging habitat shall be</i></p>	California Department of Fish and Wildlife	nesting season (March 15 th to September 15 th)	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>mitigated by preserving 60.7 acres of suitable Swainson's hawk foraging habitat (1:1 mitigation for permanent impacts to foraging habitat).³ The mitigation land used to mitigate impacts to the California tiger salamander (see Mitigation Measure IV-3) shall also constitute suitable Swainson's hawk foraging habitat.</i></p> <p><i>As an alternative to completion of Mitigation Measure IV-6, the project applicant could comply with one of the following conditions:</i></p> <ol style="list-style-type: none"> <i>1. Comply with the applicable terms and conditions of the ECCC HCP/NCCP, as determined in written "Conditions of Coverage" by the East Contra Costa County Habitat Conservancy (Conservancy), provided that the City has first entered into an agreement with the Conservancy for coverage of impacts to ECCC HCP/NCCP Covered Species; or</i> <i>2. Comply with a habitat conservation plan and/or natural community conservation plan developed and adopted by the City, including payment of applicable fees, provided that CDFW and FWS have approved the conservation plan.</i> 			

³ The 60.7 acres of permanently impacted habitat includes off-site improvement areas that overlap with the Promenade/Vineyards at Sand Creek Project. For any off-site impacted habitat for which replacement habitat has already been provided as part of the Promenade/Vineyards at Sand Creek Project, further mitigation is not required.



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>Western Burrowing Owl</i></p> <p><i>IV-7 Prior to initiation of ground-disturbing activities, a preconstruction survey for burrowing owls shall be conducted. The CDFG's Staff Report on Burrowing Owl Mitigation (CDFG 2012) states that take avoidance (preconstruction) surveys shall be conducted 14 days prior to ground disturbance. As burrowing owls may recolonize a site after only a few days, time lapses between project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance to ensure absence of the species. The results of the survey shall be submitted to the City of Antioch Community Development Department.</i></p> <p><i>Burrowing owl surveys shall be conducted by walking the entire project site and (where possible) in areas within 150 meters (approximately 500 feet) of the proposed project impact zone. The 150-meter buffer zone shall be surveyed to identify burrows and owls outside of the proposed disturbance area which may be impacted by factors such as noise and vibration (heavy equipment) during project construction.</i></p> <p><i>Pedestrian survey transects shall be spaced to allow 100 percent visual coverage of the</i></p>	City of Antioch Community Development Department	Prior to initiation of ground-disturbing activities	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
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		<p>ground surface. The distance between transect center lines shall be 7 meters to 20 meters and shall be reduced to account for differences in terrain, vegetation density, and ground surface visibility. Poor weather may affect the surveyor's ability to detect burrowing owls thus, the biologist shall avoid conducting surveys when wind speed is greater than 20 kilometers per hour and the site is affected by precipitation or dense fog. To avoid impacts to owls from surveyors, owls and/or occupied burrows shall be avoided by a minimum of 50 meters (approximately 160 feet) wherever practical to avoid flushing occupied burrows. Disturbance to occupied burrows shall be avoided during all seasons.</p> <p>If burrowing owls are detected on the site, the following restricted activity dates and setback distances are recommended per the CDFG's Staff Report on Burrowing Owl Mitigation (CDFG 2012).</p> <ul style="list-style-type: none"> • From April 1 through October 15, low disturbance and medium disturbance activities shall have a 200-meter buffer while high disturbance activities shall have a 500-meter buffer from occupied nests. • From October 16 through March 31, low disturbance activities shall have a 50- meter buffer, medium disturbance activities shall have a 100-meter 			



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p>buffer, and high disturbance activities shall have a 500-meter buffer from occupied nests.</p> <ul style="list-style-type: none"> No earth-moving activities or other disturbance shall occur within the afore- mentioned buffer zones of occupied burrows. The buffer zones shall be fenced as well. If burrowing owls are found in the proposed project area, a qualified biologist shall delineate the extent of western burrowing owl habitat on the site. <p>The mitigation land used to mitigate impacts to the California tiger salamander (see Mitigation Measure IV-3) shall also constitute suitable western burrowing owl mitigation land.</p> <p>Tricolored Blackbird</p> <p>IV-8 Prior to any ground-disturbing activities commencing between February 1 and August 31, the project applicant shall retain a qualified biologist to conduct a nesting survey for tricolored blackbird. A written summary of the survey results shall be submitted to the City of Antioch Community Development Department. If tricolored blackbirds are not identified during the surveys, further mitigation is not required.</p> <p>If nesting tricolored blackbirds are identified during the surveys, a 300-foot radius around</p>			
			City of Antioch Community Development Department	Prior to any ground-disturbing activities commencing between February 1 and August 31 within the project site and off-site improvement areas	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>the nesting colony shall be staked with bright orange lath or other suitable staking. The size of the buffer may be altered if a qualified biologist conducts behavioral observations and determines the nesting tricolored blackbirds are well acclimated to disturbance. In such a case, the biologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance or harassment to the nesting tricolored blackbirds. Construction or earth-moving activity shall not occur within the established buffer until it is determined by a qualified biologist that the young have fledged (i.e., left the nest) and have attained sufficient flight skills to avoid project construction zones, as typically occurs by August 1. Construction or earth-moving activity may occur earlier or later, subject to the discretion of a qualified biologist. If a qualified biologist is not hired to watch the nesting tricolored blackbirds, then the buffers shall be maintained in place through the month of August and work within the buffer can commence September 1. If buffers are removed prior to September 1, the qualified biologist monitoring the nesting buffer(s) shall prepare and submit a report to the City of Antioch that provides details about the nesting outcome and the removal of buffers. The report shall be submitted prior to the time that nest protection buffers are removed if the date is before September 1.</i></p>			



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>Nesting Migratory Birds</i></p> <p>IV-9 <i>If project site disturbance associated with the proposed project would commence between March 1 and September 1, a preconstruction nesting survey shall be completed in the 15-day period prior to commencing with any proposed project related disturbance on the project site or off-site improvement areas. The nesting survey shall be conducted on the project site and within a zone of influence around the project site. The zone of influence includes those areas off the project site where birds could be disturbed by earth-moving vibrations or noise as determined by a qualified ornithologist. Accordingly, the nesting survey(s) must cover the project site and an area around the project site boundary. A written summary of the survey results shall be submitted to the City of Antioch Community Development Department. If special-status birds are not identified during the surveys, further mitigation is not required.</i></p> <p><i>If special-status birds are identified nesting on or adjacent to the project site, a non-disturbance buffer of 100 feet shall be established or as otherwise prescribed by a qualified ornithologist. If common (that is, not special-status) birds, for example, California towhee, California scrub jay, or acorn woodpeckers (<i>Melanerpes formicivorus</i>), are identified nesting on or adjacent to the project</i></p>	City of Antioch Community Development Department	If project site disturbance associated with the proposed project would commence between March 1 and September 1, within 15 days prior to commencing project-related disturbance	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p>site, a non-disturbance buffer of 75 feet shall be established or as otherwise prescribed by a qualified ornithologist. The buffer shall be demarcated with painted orange lath or via the installation of orange construction fencing. Disturbance within the buffer shall be postponed until it is determined by a qualified ornithologist that the young have fledged and have attained sufficient flight skills to leave the area or that the nesting cycle has otherwise completed.</p> <p>Nesting buffers shall be maintained until September 1 unless a qualified ornithologist determines that young have fledged and are independent of their nests at an earlier date. If nest protection buffers are removed prior to September 1, the qualified biologist conducting the nesting surveys shall prepare and submit a report to the City of Antioch that provides details about the nesting outcome and the removal of buffers. The report shall be submitted prior to the time that nest protection buffers are removed if the date is before September 1.</p> <p>Raptors (Including White-Tailed Kite)</p> <p>IV-10 Prior to commencement of ground-disturbing activities or tree removal between February 1 and August 31, the project applicant shall retain a qualified biologist to conduct raptor nesting surveys. The raptor nesting surveys</p>			
			City of Antioch Community Development Department	Prior to commencement of ground-disturbing activities or tree removal between	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p><i>shall include examination of all trees within 300 feet of the entire project site, including trees that are not planned for removal. A written summary of the survey results shall be submitted to the City of Antioch Community Development Department. If nesting raptors are not identified during the surveys, further mitigation is not required.</i></p> <p><i>If nesting raptors, including white-tailed kite, are identified during the surveys, the dripline of the nest tree shall be fenced with orange construction fencing (provided the tree is on the project site), and a 300-foot radius around the nest tree shall be staked with bright orange lath or other suitable staking. If the tree is located off the project site, then the buffer shall be demarcated per above where the buffer intersects the project site. The size of the buffer may be altered if a qualified raptor biologist conducts behavioral observations and determines the nesting raptors are well acclimated to disturbance. In such case, the raptor biologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting raptors. Construction or earth-moving activity shall not occur within the established buffer until it is determined by a qualified raptor biologist that the young have fledged (i.e., left the nest) and have attained sufficient flight skills to avoid project construction zones, which typically occurs by August 1. Initiation of</i></p>		February 1 and August 31	



MITIGATION MONITORING AND REPORTING PROGRAM Creekside/Vineyards at Sand Creek Project					
Impact Number	Impact	Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
		<p>construction or earth-moving activity may be earlier or later, as determined by a qualified raptor biologist. If a qualified biologist is not hired to watch the nesting raptors, then the buffers shall be maintained in place through the month of August and work within the buffer may commence September 1. If buffers are removed prior to September 1, the qualified raptor biologist monitoring the nesting buffer shall prepare and submit a report to the City of Antioch that provides details about the nesting outcome and the removal of buffers. The report shall be submitted prior to the time that nest protection buffers are removed if the date is before September 1.</p> <p>San Joaquin Kit Fox</p> <p>IV-11 The project applicant shall implement the following standard avoidance measures for San Joaquin kit fox:</p> <ul style="list-style-type: none"> An education program shall be conducted by a qualified biologist prior to the start of construction to explain the endangered species concerns to contractors working at the project site. The program shall include an explanation of the FESA and CESA and any endangered species concerns in the area. A sign-in sheet shall be distributed to all participants of the education program and 	<p>City of Antioch Community Development Department</p> <p>U.S. Fish and Wildlife Service</p> <p>California Department of Fish and Wildlife</p>	<p>Prior to the start of construction and during construction activities on the project site and within the off-site improvement areas</p>	



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		<p><i>submitted to the City of Antioch within two weeks of program completion.</i></p> <ul style="list-style-type: none"> <i>Qualified biologists shall conduct preconstruction den surveys no more than 14 days prior to site grading to ensure that potential kit fox dens are not disrupted. If “potential dens” are not identified during the surveys (potential dens are defined as burrows at least four inches in diameter which open up within two feet), further mitigation is not required. If potential dens are identified, infrared camera stations shall be set up and maintained for three consecutive nights at den openings prior to initiation of grading activities to determine the status of the potential dens. If kit fox is not found to be using the den, site grading may proceed unhindered. However, if a kit fox is found using a den site within the project site, the USFWS and the CDFW shall be notified and consulted before work activities resume. A written summary of the survey results shall be submitted to the City of Antioch Community Development Department.</i> <i>To prevent harm to San Joaquin kit fox, any steep-walled holes and/or trenches excavated on the project site shall be completely covered at the end</i> 			



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		<p>of each workday or escape ramps shall be provided to allow any entrapped animals to escape unharmed. All pipe sections stored at the project site overnight that are four inches in diameter or greater shall be inspected for San Joaquin kit fox before the pipes are moved or buried. If San Joaquin kit fox are identified in the work area at any time, the USFWS and/or the CDFW, as well as the City, shall be notified and consulted before work activities resume. All trash items shall be removed from the site to reduce the potential for attracting predators of San Joaquin kit fox. Contractors shall be prohibited from bringing firearms and pets to the job site.</p> <p>American Badger</p> <p>IV-12 The project applicant shall retain a qualified biologist to conduct a preconstruction den survey within 21 days prior to site grading. If potential dens are not identified, further mitigation is not required. If a potential den is located, infrared camera stations shall be set up and maintained for three consecutive nights at the potential den openings prior to initiation of grading/work activities to determine the status of the potential dens. If American badger is not found to be using the</p>			
			<p>City of Antioch Community Development Department</p> <p>California Department of Fish and Wildlife</p>	Within 21 days prior to site grading	



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		den, the burrow shall be filled, and site grading may proceed in the vicinity of the burrow(s) unhindered. However, if American badger is found to be using a den site within the area of proposed grading, provided it is not a natal den, the badger shall be passively and humanely evicted from its den if the individual could be impacted by grading or other activities. If a natal den is found, the project proponent shall consult with CDFW to prepare an eviction plan and shall submit the eviction plan to the City prior to implementation. A written summary of the survey results shall be submitted to the City of Antioch Community Development Department.			
IV-b., IV-c.	<p>Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.</p> <p>Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.)</p>	<p>IV-13 Prior to discharging any dredged or fill materials into any waters of the U.S. within the project site and/or the off-site improvement areas, the applicant shall obtain permit authorization to fill wetlands under Section 404 of the federal CWA (Section 404 Permit) from USACE. The Section 404 Permit application shall include an assessment of directly impacted, avoided, and preserved acreages to waters of the U.S. Mitigation measures shall be developed as part of the Section 404 Permit to ensure no net loss of wetland function and values. Mitigation for direct impacts to waters of the U.S. within the project site and/or the off-site improvement areas would occur at a minimum of 1:1 ratio for direct impacts by purchasing seasonal wetland credits from the Cosumnes Mitigation</p>	<p>City of Antioch Community Development Department</p> <p>U.S. Army Corps of Engineers</p> <p>Central Valley Regional Water Quality Control Board</p>	Prior to issuance of grading permits	



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	through direct removal, filling, hydrological interruption, or other means.	<p><i>Bank or other wetland mitigation bank that services the project site, as approved by the USACE and the RWQCB.</i></p> <p><i>Alternatively, the project proponent may create, preserve, and manage new seasonal wetlands on or off of the project site at a 2:1 mitigation ratio. A project-specific Wetland Mitigation and Monitoring Plan prepared by a qualified wetland restoration ecologist that includes the following information shall be provided to the City prior to conducting any activity that would result in the placement of any fill material into a water of the U.S. or water of the State:</i></p> <ul style="list-style-type: none"> <i>• A description of the impacted water;</i> <i>• A map depicting the location of the mitigation site(s) and a description of existing site conditions;</i> <i>• A detailed description of the mitigation design that includes: (i) the location of the new seasonal wetlands; (ii) proposed construction schedule; (iii) a planting/vegetation plan; (iv) specific monitoring metrics, and objective performance and success criteria, such as delineation of created area as jurisdictional waters using USACE published methods; and (v) contingency measures if the created wetlands do not achieve the specified success criteria; and</i> 			



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		<ul style="list-style-type: none"> Short-term and long-term management and monitoring methods. <p>If the wetland mitigation site is a separate mitigation property, the project proponent will grant a conservation easement to a qualified entity, as defined by Section 81.5.3 of the California Civil Code, preserving the created seasonal wetland(s) in perpetuity, and establish an endowment fund to provide for the long-term management, maintenance, and monitoring of the created seasonal wetland(s). If the proposed project includes placing fill material into jurisdictional waters of the U.S. or waters of the State, the project proponent shall provide the City with a copy of permits issued by the USACE and RWQCB authorizing the fill.</p> <p>In addition, a Water Quality Certification or waiver pursuant to Section 401 of the CWA must be obtained for Section 404 permit actions. Proof of compliance with the mitigation measure shall be submitted to the City of Antioch Community Development Department prior to the issuance of grading permits.</p>			
		<p>IV-14 Impacts to riparian habitat within CDFW's Section 1602 jurisdictional areas that would occur during the installation of two stormwater outfalls in Sand Creek, construction of the</p>	City of Antioch Community Development Department	Prior to issuance of grading permits	



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		<p><i>Hillcrest Avenue bridge over Sand Creek, and the installation of the potential EVA/Pedestrian Bridge over Sand Creek, shall be mitigated through planting California native trees and/or shrubs within the Sand Creek buffer area. Impacted trees and shrubs shall be mitigated with a 3:1 (replacement to impacts) ratio. Replacement trees and shrubs shall be a minimum of one gallon size trees/shrub replacements.</i></p> <p><i>In addition, the project proponent will implement appropriate BMPs to prevent construction related impacts that could introduce de minimus fill or other pollutants into Sand Creek and the eastern ephemeral channel on the project site. The measures shall include the installation of wildlife- friendly hay wattles and/or silt fence that will prevent unintended de minimus fill impacts to Sand Creek while the stormwater outfalls are constructed. In addition, orange silt fencing shall be installed at the top-of-bank of Sand Creek to prevent unintended human and equipment traffic adjacent to Sand Creek. Finally, the dripline of all protected trees within the drainages on the project site, if near work areas, shall be protected through the installation of orange construction fencing.</i></p> <p><i>The project proponent shall satisfy this mitigation by providing the City of Antioch with a fully executed copy of a Streambed</i></p>	California Department of Fish and Wildlife		



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		<i>Alteration Agreement (SBAA) with the CDFW, if one is necessary, that includes these, or other functionally equivalent, BMPs, prior to installation of the two stormwater outfalls in Sand Creek, construction of the Hillcrest Avenue bridge over Sand Creek, and/or installation of the potential EVA/Pedestrian Bridge over Sand Creek. The project proponent shall implement the conditions of the executed SBAA.</i>			
IV-e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	<p><i>IV-15 Prior to issuance of certificates of occupancy, all trees that are legally removed as part of the proposed project shall be replaced according to the following schedule, to the satisfaction of the City of Antioch Community Development Department:</i></p> <ol style="list-style-type: none"> <i>1. Each established tree: two 24-inch box trees.</i> <i>2. Each mature tree: two 48-inch box trees.</i> <p><i>The locations and sizes of the replacement trees shall be clearly shown on the final landscape plans, subject to review and approval by the City.</i></p>	City of Antioch Community Development Department	Prior to issuance of certificates of occupancy	
V-b., V-c.	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5.	<p><i>V-1. Prior to initiation of ground-disturbing activities, a consultant and construction worker tribal cultural resources training program shall be provided for all personnel involved in project implementation, to be administered by a qualified cultural resources specialist. The training program shall include</i></p>	City of Antioch Community Development Department	Prior to initiation of ground-disturbing activities	



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	Disturb any human remains, including those interred outside of dedicated cemeteries.	<p><i>relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program shall also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site, and shall outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program shall also underscore the requirement for confidentiality and culturally-appropriate treatment for any find of significance to Native Americans and behaviors, consistent with Native American tribal values. A sign-in sheet shall be distributed to all participants of the training program and submitted to the City of Antioch within two weeks of program completion.</i></p> <p>V-2 <i>In the event of the accidental discovery or recognition of any or human remains, further excavation or disturbance of the find or any nearby area reasonably suspected to overlie adjacent human remains shall not occur until compliance with the provisions of CEQA Guidelines Section 15064.5(e)(1) and (2) has occurred. The Guidelines specify that in the event of the discovery of human remains other than in a dedicated cemetery, no further excavation at the site or any nearby area suspected to contain human remains shall</i></p>	<p>City of Antioch Community Development Department</p> <p>County Coroner</p> <p>Native American Heritage Commission</p>	During ground-disturbing activities	



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		<p>occur until the County Coroner has been notified to determine if an investigation into the cause of death is required. If the coroner determines that the remains are Native American, then, within 24 hours, the Coroner must notify the Native American Heritage Commission, which in turn will notify the most likely descendants who may recommend treatment of the remains and any grave goods. If the Native American Heritage Commission is unable to identify a most likely descendant or most likely descendant fails to make a recommendation within 48 hours after notification by the Native American Heritage Commission, or the landowner or his authorized agent rejects the recommendation by the most likely descendant and mediation by the Native American Heritage Commission fails to provide a measure acceptable to the landowner, then the landowner or his authorized representative shall rebury the human remains and grave goods with appropriate dignity at a location on the property not subject to further disturbances. Should human remains be encountered, a copy of the resulting County Coroner report noting any written consultation with the Native American Heritage Commission shall be submitted as proof of compliance to the City's Community Development Department.</p>			
		<p>V-3 If any prehistoric or historic artifacts, or other indications of cultural deposits, such as</p>	City of Antioch Community	During ground-disturbing activities	



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		<p><i>historic privy pits or trash deposits, are found once ground disturbing activities are underway, all work within the vicinity of the find(s) shall cease, the City of Antioch shall be notified, and the find(s) shall be immediately evaluated by a qualified archaeologist and Native American representatives from culturally affiliated Native American tribes to assess the significance of the find and make recommendations for further evaluation and treatment, as necessary. Such recommendations shall be documented in the project record. For any recommendations made by interested Native American tribes which are not implemented, a justification for why the recommendation was not followed will be provided in the project record. If the find is determined to be a historical or unique archaeological resource, contingency funding and a time allotment to allow for implementation of avoidance measures or appropriate mitigation shall be made available (CEQA Guidelines Section 15064.5). Work may continue on other parts of the project site while historical or unique archaeological resource mitigation takes place (Public Resources Code Sections 21083 and 21087).</i></p> <p><i>If inadvertent adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, consultation with the culturally affiliated Native American tribes regarding the standards contained in Public</i></p>	<p>Development Department</p> <p>Culturally affiliated Native American tribes</p>		



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		<i>Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur, in order to coordinate for compensation for the adverse impacts by replacing or providing substitute resources or environments.</i>			
VII-a., VII-c., VII-d.	<p>Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction and landslides.</p> <p>Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.</p> <p>Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.</p>	<p><i>VII-1 Prior to issuance of any grading permits, all recommendations set forth in Sections 5.0, 6.0, and 7.0 of the Geotechnical Summary Report prepared for the proposed project shall be reflected on the project grading and foundation plans, subject to review and approval by the City Engineer.</i></p> <p><i>VII-2 Prior to issuance of any grading permits, the project applicant shall submit to the City of Antioch Engineering Department, for review and approval, a design-level geotechnical exploration study produced by a California Registered Civil Engineer or Geotechnical Engineer and identify grading and building practices necessary to achieve compliance with the latest adopted edition of the California Building Standards Code's geologic, soils, and seismic requirements. Consistent with Section 8.0 of the Geotechnical Summary Report prepared for the proposed project, the design-level geotechnical exploration study shall include supplemental borings, surface samples, Cone Penetration Tests (CPTs) and laboratory soil testing to address the following geotechnical concerns:</i></p>	<p>City Engineer</p> <p>City of Antioch Engineering Department</p>	<p>Prior to issuance of any grading permits</p> <p>Prior to issuance of any grading permits</p>	



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		<ul style="list-style-type: none"> • Liquefaction-induced settlement risks, lateral spreading risks, and design considerations. • Detailed foundation design criteria based on building types and surficial soil material properties. • Identification of any undocumented fill located on the property. <p>The design-level geotechnical exploration study shall identify measures to address construction requirements to mitigate any potential geotechnical hazards.</p>			
VII-b.	Result in substantial erosion or the loss of topsoil.	<p>VII-3 Prior to issuance of grading and building permits, the project applicant shall submit, for the review and approval by the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Measures shall include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • Hydro-seeding; • Placement of erosion control measures within drainage ways and ahead of drop inlets; • The temporary lining (during construction activities) of drop inlets with "filter fabric" (a specific type of geotextile fabric); • The placement of straw wattles along slope contours; 	City Engineer	Prior to issuance of grading and building permits	



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		<ul style="list-style-type: none"> • Directing subcontractors to a single designation “wash-out” location (as opposed to allowing them to wash-out in any location they desire); • The use of siltation fences; and • The use of sediment basins and dust palliatives. 			
VII-f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<p>VII-4 Prior to initiation of ground-disturbing activities, the applicant shall retain the services of a professional paleontologist to conduct a Worker’s Environmental Awareness Training for the construction crew that will be conducting earthmoving activities (i.e., grading and excavation) at the project site and off-site improvement areas. The Environmental Awareness Training may be conducted concurrently with the tribal cultural resources training program required per Mitigation Measure V-1 of this Initial Study. Consistent with the recommendations of the 2020 Cultural Resources Assessment prepared for the proposed project by Natural Investigations, training shall include information on the types of fossils that may be encountered during project work, relevant compliance requirements, and the course to action to be taken in the event of an inadvertent fossil discovery.</p> <p>Should any vertebrate fossils (e.g., teeth, bones), an unusually large or dense accumulation of intact invertebrates, or well-preserved plant material (e.g., leaves) be</p>	City of Antioch Community Development Department	Prior to initiation of and during ground-disturbing activities	



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		<i>unearthed by the construction crew, ground-disturbing activity shall be diverted to another part of the project site and the City and paleontologist shall be called on-site to assess the find and, if significant, recover the find in a timely matter. Finds determined significant by a paleontologist shall then be conserved and deposited with a recognized repository, such as the University of California Museum of Paleontology. The alternative mitigation would be to leave the significant finds in place, determine the extent of significant deposit, and avoid further disturbance of the significant deposit. Within two weeks of training completion, proof of the construction crew awareness training shall be submitted to the City's Community Development Department in the form of a copy of training materials and the completed training attendance roster.</i>			
IX-b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	IX-1 <i>Prior to final map approval, the project applicant shall submit to the City of Antioch Engineering Department, for review and approval, plans which show that future inhabited structures will not be located over the four on-site abandoned oil/gas wells. The plans shall be completed in compliance with the Geologic Energy Management Division (CalGEM) Construction Site Review Program, which includes guidelines and recommendations for setbacks and mitigation measures for venting systems. If grading is proposed proximate to the four abandoned well locations, CalGEM shall be consulted to</i>	City of Antioch Engineering Department CalGEM	Prior to final map approval	



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		<p><i>determine if the wells will require modification in casing height. In addition, CalGEM shall be consulted to determine if the well abandonment procedures are consistent with current requirements.</i></p> <p>IX-2 <i>If remnant oil/gas pipelines are encountered during site development work, the pipelines shall be abandoned and/or removed in accordance with applicable federal, State, and/or local standards to the satisfaction of the Contra Costa Environmental Health Department and the City Engineer. If any indicators of apparent soil contamination (soil staining, odors, debris fill material, etc.) are found at the project site associated with the petroleum pipelines, the impacted area shall be isolated from surrounding, non-impacted areas. The project environmental professional shall obtain samples of the potentially impacted soil for analysis of the contaminants of concern and comparison with applicable regulatory residential screening levels (i.e., Environmental Screening Levels, California Human Health Screening Levels, Regional Screening Levels, etc.). Where the soil contaminant concentrations exceed the applicable regulatory residential screening levels, the impacted soil shall be excavated and disposed of offsite at a licensed landfill facility to the satisfaction of the Contra Costa Environmental Health Department. If soil contaminants do not exceed the applicable</i></p>	<p>City Engineer</p> <p>Contra Costa Environmental Health Department</p>	<p>If remnant oil/gas pipelines are encountered during site development work</p>	



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		<i>regulatory residential screening levels, further action is not required.</i>			
X-a.	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	X-1 <i>Prior to issuance of grading permits, the contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP). The developer shall file the Notice of Intent (NOI) and associated fee to the SWRCB. The SWPPP shall serve as the framework for identification, assignment, and implementation of BMPs. The contractor shall implement BMPs to reduce pollutants in stormwater discharges to the maximum extent practicable. The SWPPP shall be submitted to the Director of Public Works/City Engineer for review and approval and shall remain on the project site during all phases of construction. Following implementation of the SWPPP, the contractor shall subsequently demonstrate the SWPPP's effectiveness and provide for necessary and appropriate revisions, modifications, and improvements to reduce pollutants in stormwater discharges to the maximum extent practicable.</i>	Director of Public Works/City Engineer	Prior to issuance of grading permits	
XIII-a.	Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable	XIII-1 <i>During construction activities, the use of heavy construction equipment shall adhere to Sections 5-17.04 and 5-17.05 of the City's Municipal Code with regard to hours of operation, which state that it is unlawful for any person to operate heavy construction equipment or otherwise be involved in construction activities during the hours specified below:</i>	City Engineer	During construction activities	



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	standards of other agencies.	<ol style="list-style-type: none"> 1. On weekdays prior to 7:00 AM and after 6:00 PM. 2. On weekdays within 300 feet of occupied dwelling space, prior to 8:00 AM and after 5:00 PM. 3. On weekends and holidays, prior to 9:00 AM and after 5:00 PM, irrespective of the distance from the occupied dwelling. <p>Such standards shall be included, via written notation, on final improvement plans, to the satisfaction of the City Engineer.</p> <p>XIII-2 The project applicant shall ensure that all on-site construction activities occur pursuant to the criteria identified in Policy 11.6.2, Temporary Construction, of the City of Antioch General Plan. Such criteria include, but are not limited to, preparation of a construction-related noise mitigation plan. The construction-related noise mitigation plan shall be submitted to the Community Development Department for review and approval prior to issuance of grading permits for the project. Items included in the plan could contain, but would not be limited to, the following:</p> <ul style="list-style-type: none"> • All equipment driven by internal combustion engines shall be equipped with mufflers which are in good working condition and appropriate for the equipment; 	City of Antioch Community Development Department	Prior to issuance of grading permits	



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		<ul style="list-style-type: none"> The construction contractor shall utilize “quiet” models of air compressors and other stationary noise sources where the technology exists; At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practical from noise-sensitive receptors; Unnecessary idling of internal combustion engines shall be prohibited; Owners and occupants of residential and non-residential properties located within 300 feet of the construction site shall be notified of the construction schedule in writing; and The construction contractor shall designate a “noise disturbance coordinator” who shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and institute reasonable measures as warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site. 			



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		<p><i>XIII-3 A solid noise barrier measuring a minimum of six feet in height shall be constructed along Hillcrest Avenue where residences are located within 157 feet of the roadway. Suitable materials for the noise barrier include concrete panels, concrete masonry units, earthen berms, or any combination thereof. If roadway elevations and building pad elevations are not equal, the barrier heights and locations shall be reviewed once final grading plans are available. The final design of the noise barrier shall be approved by the Community Development Department prior to building permit issuance.</i></p> <p><i>XIII-4 Prior to building permit issuance, the construction drawings for the project shall include a suitable form of forced-air mechanical ventilation for all proposed residential units, subject to approval by the Community Development Department, such that doors and windows may be kept closed at the occupant's discretion to control interior noise and achieve the City's 45 dB L_{dn} interior noise level threshold.</i></p>	<p>City of Antioch Community Development Department</p> <p>City of Antioch Community Development Department</p>	<p>Prior to issuance of building permits</p> <p>Prior to issuance of building permits</p>	
XVIII-a., XVIII-b.	Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape	XVIII-1 Implement Mitigation Measures V-1, V-2, and V-3.	See Mitigation Measures V-1, V-2, and V-3	See Mitigation Measures V-1, V-2, and V-3	



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	<p>that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).</p> <p>Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is a resource</p>				



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	determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?				

