

**ANNOTATED
AGENDA
CITY OF ANTIOCH PLANNING COMMISSION
ANTIOCH COUNCIL CHAMBERS
200 "H" STREET**

WEDNESDAY, APRIL 18, 2018

6:30 P.M.

**NO PUBLIC HEARINGS WILL BEGIN AFTER 10:00 P.M.
UNLESS THERE IS A VOTE OF THE PLANNING COMMISSION
TO HEAR THE MATTER**

APPEAL

All items that can be appealed under 9-5.2509 of the Antioch Municipal Code must be appealed within five (5) working days of the date of the decision. The final appeal date of decisions made at this meeting is 5:00 p.m. on **WEDNESDAY, APRIL 25, 2018**.

If you wish to speak, either during "public comments" or during an agenda item, fill out a Speaker Request Form and place in the Speaker Card Tray. This will enable us to call upon you to speak. Each speaker is limited to not more than 3 minutes. During public hearings, each side is entitled to one "main presenter" who may have not more than 10 minutes. These time limits may be modified depending on the number of speakers, number of items on the agenda or circumstances. No one may speak more than once on an agenda item or during "public comments". Groups who are here regarding an item may identify themselves by raising their hands at the appropriate time to show support for one of their speakers.

ROLL CALL

6:30 P.M.

Commissioners	Zacharatos, Chair
	Parsons, Vice Chair
	Motts
	Turnage
	Conley
	Martin
	Schneiderman

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

CONSENT CALENDAR

All matters listed under Consent Calendar are considered routine and are recommended for approval by the staff. There will be one motion approving the items listed. There will be no separate discussion of these items unless members of the Commission, staff or the public request specific items to be removed from the Consent Calendar for separate action.

- | | | | | |
|----|-----------------------------|-----------|-----------------------|-----------------|
| 1. | APPROVAL OF MINUTES: | A. | March 7, 2018 | APPROVED |
| | | B. | March 21, 2018 | APPROVED |

* * * END OF CONSENT CALENDAR * *

STAFF REPORT

PRESENTATION

STAFF REPORT

2. **Cannabis Regulations**

No Action Taken

NEW ITEMS

3. **AR-17-17 – Kaiser Solar** - Ameresco, Inc., requests design review approval of proposed parking canopies with photovoltaic modules attached to the roofs of the structures over a portion of the existing parking lot at Kaiser Permanente Antioch Medical Center. The proposal would require removing existing trees and light poles and replacing the removed landscaping (**APNs 057-022-020, 057-022-021, 057-022-194**).

STAFF REPORT

RESOLUTION NO. 2018-12

4. **AR-18-04 – Mesa Billboard** - Mesa Outdoor is requesting design review approval to upgrade the west facing portion of their existing billboard from a static display to a digital display. The project site is located on the northeast corner of Delta Fair Boulevard and Century Way (**APN 074-080-029**).

STAFF REPORT

RESOLUTION NO. 2018-13

5. **The Ranch DEIR** - Staff recommends that the Planning Commission receive public comments on the Draft Environmental Report (EIR) for The Ranch Project. The meeting is not to debate or discuss the merits of the project, but to receive verbal comments that will be responded to in the Final EIR. An action from the Planning Commission is not needed at this time, but just the receiving of public comments.

STAFF REPORT

NO ACTION TAKEN

6. **Election of Chair and Vice-Chair**

Chair: *Parsons*
Vice Chair: *Turnage*

ORAL COMMUNICATIONS

STAFF REPORT

WRITTEN COMMUNICATIONS

COMMITTEE REPORTS

ADJOURNMENT 8:31 pm

Notice of Availability of Reports

This agenda is a summary of the discussion items and actions proposed to be taken by the Planning Commission. For almost every agenda item, materials have been prepared by the City staff for the Planning Commission's consideration. These materials include staff reports which explain in detail the item before the Commission and the reason for the recommendation. The materials may also include resolutions or ordinances which are proposed to be adopted. Other materials, such as maps and diagrams, may also be included. All of these materials are available at the Community Development Department located on the 2nd floor of City Hall, 200 "H" Street, Antioch, California, 94509, between the hours of 8:00 a.m. and 5:00 p.m. Monday through Friday for inspection and copying (for a fee). Copies are also made available at the Antioch Public Library for inspection. Questions on these materials may be directed to the staff member who prepared them, or to the Community Development Department, who will refer you to the appropriate person.

Notice of Opportunity to Address the Planning Commission

The public has the opportunity to address the Planning Commission on each agenda item. You may be requested to complete a yellow Speaker Request form. Comments regarding matters not on this Agenda may be addressed during the "Public Comment" section on the agenda.

Accessibility

The meetings are accessible to those with disabilities. Auxiliary aids will be made available for persons with hearing or vision disabilities upon request in advance at (925) 779-7009 or TDD (925) 779-7081.

**CITY OF ANTIOCH
PLANNING COMMISSION**

**Regular Meeting
6:30 p.m.**

**March 7, 2018
City Council Chambers**

Vice Chair Parsons called the meeting to order at 6:30 P.M. on Wednesday, March 7, 2018, in the City Council Chambers. She stated that all items that can be appealed under 9-5.2509 of the Antioch Municipal Code must be appealed within five (5) working days of the date of the decision. The final appeal date of decisions made at this meeting is 5:00 P.M. on Wednesday, March 14, 2018.

ROLL CALL

Present: Commissioners Motts, Turnage, Conley, Schneiderman, Vice Chair Parsons
Absent: Commissioner Martin and Chair Zacharatos
Staff: Planning Manager, Alexis Morris
Associate Planner, Kevin Scudero
Assistant City Engineer, Lynne Filson
Interim City Attorney, Derek Cole
Minutes Clerk, Kitty Eiden

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

None.

CONSENT CALENDAR

Commissioner Conley requested the minutes be separated and so a vote could be taken on each item individually.

1. **Approval of Minutes:** January 17, 2018
February 7, 2018

On motion by Commissioner Conley, seconded by Commissioner Turnage, the Planning Commission approved the minutes of January 17, 2018 as presented. The motion carried the following vote:

AYES: Motts, Turnage, Conley and Schneiderman
NOES: None
ABSTAIN: Parsons
ABSENT: Martin and Zacharatos

On motion by Commissioner Motts, seconded by Commissioner Schneiderman, the Planning Commission approved the minutes of February 7, 2018 as presented. The motion carried the following vote:

AYES: *Motts, Turnage, Schneiderman*
NOES: *None*
ABSTAIN: *Conley and Parsons*
ABSENT: *Martin and Zacharatos*

NEW PUBLIC HEARINGS

- 2. UP-17-05, AR-17-15, V-17-04 Arco AM/PM Gas Station/Convenience Store/Care Wash** – PM Design Group requests Planning Commission approval of a use permit, design review, variance, and lot merger of two parcels for the construction of a gas station, car wash, and convenience store on the newly created parcel. The project site is located at the northwest corner of West Tenth Street and Auto Center Drive (APN's 074-040-040, 074-010-041).

Associate Planner Scudero presented the staff report dated March 2, 2018 recommending the Planning Commission approve the lot merger, use permit, variance and design review for a gas station, convenience store, and self service care wash subject to the condition contained in the staff report's attached resolution.

In response to Commissioner Motts, Assistant City Engineer Filson clarified that the applicant was proposing to replace the raised median with delineators and staff was in support since there were no maintenance issues.

Craig Schafer, PM Design Group for BP, stated they had worked with staff to develop a project that would be appropriate for this location. He noted they had no issues and they were in agreement with the recommendations from staff. He requested to amend project specific conditions to allow them to sell 3 packs of 24 ounce beer cans and expanding the cooler area from 12 to 15 linier feet to accommodate the larger containers. He noted they also proposed replacing the concrete median with delineators.

In response to Commissioner Conley, Mr. Schafer stated that the 3 packs of 24 ounce beers was a fairly new item and they were typically sold at their locations.

Commissioner Conley suggested the applicant consider selling bait out of this location since it was near the boat ramp/marina.

In response to Commissioner Motts, Mr. Patrick Lemons stated there was a surplus property to the west and their plan was to fence it with black slats to avoid people congregating in area until they were able to sell the property.

Associate Planner Kevin Scudero added that the applicant would be replacing the existing fence so the current access would be maintained.

Vice Chair Parsons expressed concern that there was a hole on the frontage of surplus property.

Mr. Lemons stated that they would maintain the surplus property frontage until it was sold.

In response to Vice Chair Parsons, Associate Planner Scudero stated the project specific condition related to the cooler size was put into place because of the proximity of this business to the baseball field. He noted that the intent behind the conditions of approval was to restrict the marketing of the single serve alcoholic beverages.

Planning Manager Morris stated that as long as single serve alcoholic beverages were not placed in the coolers to violate the conditions of approval, a few extra feet in the cooler area would not make much of a difference. She noted they were attempting to keep it relative in proportion to the floor plan size.

In response to Commissioner Motts, Associate Planner Scudero explained that this business would be prohibited from selling alcohol from 12:00 A.M. – 6:00 A.M.

In response to Vice Chair Parsons, Mr. Schafer stated they were in agreement with all other conditions of approval.

In response to Commissioner Conley, Mr. Schafer stated there would be security cameras inside and outside of the business and they would work with the local police department.

Commissioner Motts stated he supported the variances and the project.

Commissioner Schneiderman stated this project was an improvement for the area and would be beneficial to those on their way to the marina and attending activities at the sports fields.

Vice Chair Parsons stated she supported the variances for the project.

RESOLUTION NO. 2018-08

On motion by Commissioner Turnage, seconded by Commissioner Conley, the Planning Commission approved the lot merger, use permit, variance and design review for a gas station, convenience store, and self service car wash subject to the condition contained in the staff report's attached resolution with the following revisions and addition:

- ***J2 b. – Containers of beer may only be sold in packages of three or more.***
- ***J2c.i. – No more than 15 linear feet of refrigerated cooler display; and***
- ***J22 – The developer shall install delineators on Auto Center Drive from its existing terminus to the intersection with Pittsburg-Antioch Highway/W. 10th Street to prohibit illegal left turns onto or from the site.***
- ***The addition of project specific condition - That the sidewalk and asphalt along the frontage shall be repaired and maintained.***

The motion carried the following vote:

AYES:	<i>Motts, Turnage, Conley, Schneiderman and Parsons</i>
NOES:	<i>None</i>
ABSTAIN:	<i>None</i>
ABSENT:	<i>Martin and Zacharatos</i>

3. **PD-15-01 – Oakley Knolls** - Discovery Homes requests approval of a 28-unit residential subdivision at an existing 5.56 acre vacant parcel (051-043-001 through 018). The request includes adoption of an Initial Study/Mitigated Negative Declaration, a reversion to acreage of the current subdivision, a rezoning from Planned Development to Planned Development 15-01, and approval of a 28-unit subdivision with additional parcels for three bio retention basins, a private park, and a drainage parcel. The project site has a General Plan Land Use Designation of Medium Low Density Residential and is located on the north side of Oakley Road, immediately south of the terminus of Honeynut Street, east of Willow Avenue, and west of Phillips Lane (APNs 051-430-001 through 018)

Planning Manager Morris announced that due to a noticing error, staff recommended this item be continued to March 21, 2018 in order for the CEQA review to take place.

Commissioner Motts stated that when he received notice that the March 21, 2018 Planning Commission had been cancelled, he scheduled vacation; therefore, he would not be available to attend the continued Public Hearing on March 21, 2018.

Vice Chair Parsons opened the public hearing.

Duanne Shoemaker, Antioch resident, stated his property was directly to the west of the proposed project. He noted that he was concerned that this project would create an island and not provide access for the future development of the adjacent properties. Additionally, he expressed concern that the property owner of the project site had brought in fill that was questionable. He stated he had an irrigation line across his property and he wanted to maintain that easement. He objected to the project using his property for drainage and requested they seek another solution. He thanked the Planning Commission for providing him with the opportunity to speak and stated he would be attending the next meeting when this item was agendized.

In response to Commissioner Conley, Assistant City Engineer Filson stated the project would be required to provide a geotechnical report as part of the subdivision.

Vice Chair Parsons closed the public hearing.

On motion by Commissioner Motts, seconded by Commissioner Conley, the Planning Commission continued PD-15-01 – Oakley Knolls to March 21, 2018. The motion carried the following vote:

AYES:	<i>Parsons, Motts, Turnage, Conley and Schneiderman</i>
NOES:	<i>None</i>
ABSTAIN:	<i>None</i>
ABSENT:	<i>Martin and Zacharatos</i>

ORAL COMMUNICATIONS

None.

WRITTEN COMMUNICATIONS

None.

COMMITTEE REPORTS

Commissioner Motts reported that the last TRANSPLAN meeting was cancelled.

ADJOURNMENT

Vice Chair Parsons adjourned the Planning Commission at 7:04 P.M. to the next regularly scheduled meeting to be held on March 21, 2018.

Respectfully Submitted,
Kitty Eiden

**CITY OF ANTIOCH
PLANNING COMMISSION**

**Regular Meeting
6:30 p.m.**

**March 21, 2018
City Council Chambers**

Chair Zacharatos called the meeting to order at 6:32 P.M. on Wednesday, March 21, 2018 in the City Council Chambers. She stated that all items that can be appealed under 9-5.2509 of the Antioch Municipal Code must be appealed within five (5) working days of the date of the decision. The final appeal date of decisions made at this meeting is 5:00 P.M. on Wednesday, March 28, 2018.

ROLL CALL

Present: Commissioners Turnage, Conley, Schneiderman, Vice Chair
Parsons and Chair Zacharatos
Absent: Commissioners Motts and Martin
Staff: Director of Community Development, Forrest Ebbs
Assistant City Engineer, Lynne Filson
Interim City Attorney, Elizabeth Perez
Minutes Clerk, Kitty Eiden

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

None.

CONSENT CALENDAR

1. **Approval of Minutes** - None

NEW PUBLIC HEARING

2. **PD-15-01 – Oakley Knolls** - Discovery Homes requests approval of a 28-unit residential subdivision at an existing 5.56 acre vacant parcel (051-043-001 through 018). The request includes adoption of an Initial Study/Mitigated Negative Declaration, a reversion to acreage of the current subdivision, a rezoning from Planned Development to Planned Development 15-01, and approval of a 28-unit subdivision with additional parcels for three bio retention basins, a private park, and a drainage parcel. The project site has a General Plan Land Use Designation of Medium Low Density Residential and is located on the north side of Oakley Road, immediately south of the terminus of Honeynut Street, east of Willow Avenue, and west of Phillips Lane (APNs 051-430-001 through 018).

Director of Community Development Ebbs presented the staff report dated January 17, 2018, recommending the Planning Commission adopt the resolutions recommending that the City Council adopt the Initial Study/Mitigated Negative Declaration, rezone the property, and approve the Final Development Plan/Vesting Tentative Map.

In response to Vice Chair Parsons, Assistant City Engineer Filson stated she would review the sewer master plan for the City and respond back regarding the proposal for Oakley Road.

Vice Chair Parsons stated if the sewer was on the other side of the road it may be advantageous for this project to install sewer pipe in that area.

In response to Commissioner Schneiderman, Director of Community Development Ebbs stated that future plans were to redevelop the area around the BART station into a mixed use development and once the area was developed, Phillips Lane would connect.

Assistant City Engineer Filson added that the railroad tracks currently made access difficult to get to the BART station to the north so the plan was to have Viera Avenue realigned and connect into Oakley Road. Additionally, Laurel Road was intended to be extended for access to BART.

In response to Commissioner Conley, Director of Community Development Ebbs clarified that the retention basin next to the park would be fenced and screened with landscaping. He also noted that the development would be paying full park in-lieu fees.

Commissioner Conley stated that he felt a private park might create a division in the community and suggested the possibility of eliminating the park and dividing the area into two additional lots.

Director of Community Development Ebbs responded that the Planning Commission could also recommend a public access easement be granted over the park so that it functioned as a public park but the HOA would continue to maintain it. Additionally, he explained with limited side yard access, air conditioners would typically be placed in the rear yards.

In response to Chair Zacharatos, Director of Community Development Ebbs stated that at some point he would like to repeal all of the PDs and replace them with conventional zoning.

Vice Chair Parsons stated it was her understanding that the reason the lot sizes were allowed to be smaller was because there was a park.

Director of Community Development Ebbs stated the General Plan designation was 7000 sq. ft. lots; however, smaller lots may be used if there were open space park amenities to justify them. He noted he would be concerned with how this project would be consistent with the General Plan if there was no open space. He stated that he did not believe this park was large enough to draw people who would otherwise go to a neighborhood park.

In response to Commissioner Conley, Director of Community Development Ebbs explained that there was an obligation to accept the neighbor's sheet flow under the existing conditions; however, as soon as the site was redeveloped they would have to account for all of the drainage. He noted the City Engineer and the project engineer would work out a solution to avoid the neighbor's property from looking, feeling, or behaving differently after this project was developed and they were in agreement that a solution could be found.

Dana Owyong, Discovery Builders Vice President – Corporate Architect, stated they had been working on this infill development for eighteen (18) years and he appreciated working with staff on a project everyone could agree upon. He stated they were in agreement with the conditions contained in the staff report and clarified that their intent was to stain the fence in the areas visible by the public.

Kevin English, Discovery Builders, Director of Forward Planning and Land Acquisition, thanked staff for working diligently with them to fine tune the project. He noted the project as proposed was economical and brought amenities to justify the variances and setbacks. He noted the small park would not be part of the City's overall park system and would be maintained by the HOA; therefore, there were liability issues. He noted they often restricted use by fencing their parks and giving a key fob or private security codes to the HOA members. He stated they would continue to work in good faith with the Public Works Department and Civil Engineer on the drainage issue and they were happy with the solution as it stood this evening. He thanked the Commission and stated he looked forward to their support.

In response to Commissioner Conley, Assistant City Engineer Filson explained that the streets were proposed to be public and would be maintained by the City.

In response to Commissioner Schneiderman, Mr. English stated they would have liability insurance for the park and rules developed by the HOA which would be included in the closing documents.

Director of Community Development Ebbs clarified the intent was to require staining of the exterior fences in areas visible from public right of way. He reported that there was a memorandum provided this evening that struck the reference to the Mitigation Monitoring and Reporting Plan which was not produced as part of the Mitigated Negative Declaration. Additionally, he noted that a letter of objection was attached to the memo.

Chair Zacharatos closed the public hearing.

Commissioner Turnage stated he understood the project and saw the benefit; however, his personal preference was for larger lot developments. He stated he supported restricted entry for the park to address maintenance and liability issues. He suggested the applicant be provided information with regards to the City's fee schedule, should they fail to maintain landscaping.

Commissioner Conley stated he understood the project and if not approved he believed it could be developed as very high density development in the future; however, he believed there were 3-4 homes too many and there should be wider side yard setbacks. He stated development should improve the City and he did not believe this project as proposed would; therefore, he would not support it.

Chair Zacharatos stated she shared concerns regarding the lot sizes and the number of homes in the development. She noted her concern was that it would not benefit the City; therefore, she was not in support of the project as proposed. However if the number of homes were decreased, she felt it could become more feasible.

Vice Chair Parsons stated she understood the project needed to be financially feasible; however, she was also concerned for the 4 ft. side yard setbacks.

Director of Community Development Ebbs explained that a preliminary development plan went to the Planning Commission and Council in 2014 with only the lots and the project received favorably. He noted at that time there were comments that the project looked fine but direction to meet the setbacks. He further noted larger houses that required smaller setbacks were more valuable and a segment of the population did not want rear yards. He reminded the Planning Commission that this was a recommendation to the City Council and not final approval.

Commissioner Turnage stated his concern was for access of the garbage cans and noted smaller garbage cans would help with the pass through on the side yard. He further noted the trend was for smaller yards and he noted he supported the design.

In response to Chair Zacharatos, Director of Community Development Ebbs stated he had received no feedback for the project from the Antioch Police Department.

Commissioner Schneiderman stated she believed the project was well designed; however, she believed a few of the lots had very small rear yards.

Vice Chair Parsons commented that historically lots had decreased in square footage and houses had increased in size.

In response to Commissioner Schneiderman, Director of Community Development Ebbs explained that 18 foot driveways were addressed during the 2014 preliminary

development plan hearing and the Planning Commission and City Council both supported 20 feet driveways. Additionally, he noted 20 feet is the City standard.

Chair Zacharatos discussed the demand for single story floor plans.

RESOLUTION NO. 2018-09

On motion by Commissioner Turnage, seconded by Vice Chair Parsons, the Planning Commission adopted the resolution recommending the adoption of the Oakley Knolls Initial Study/Mitigate Negative Declaration (as revised in the March 21, 2018 memorandum). The motion carried the following vote:

AYES: Parsons, Turnage, Schneiderman and Zacharatos
NOES: Conley
ABSTAIN: None
ABSENT: Motts and Martin

RESOLUTION NO. 2018-10

On motion by Commissioner Turnage, seconded by Vice Chair Parsons, the Planning Commission adopted the resolution recommending approval of an ordinance for a zoning map amendment from Planned Development District (PD) to Planned Development District (PD-15-01). The motion carried the following vote:

AYES: Parsons, Turnage and Schneiderman
NOES: Conley and Zacharatos
ABSTAIN: None
ABSENT: Motts and Martin

In response to Commissioner Turnage, Assistant City Engineer Filson explained that the City could request the developer disclose in the CC&Rs the costs associated for maintenance including those performed by the City if they failed to comply.

RESOLUTION NO. 2018-11

On motion by Commissioner Turnage, seconded by Vice Chair Parsons, the Planning Commission adopted the resolution recommending approval of a Vesting Tentative Map/Final Development Plan subject to the conditions of approval. The motion carried the following vote:

AYES: Parsons, Turnage, Schneiderman and Zacharatos
NOES: Conley
ABSTAIN: None
ABSENT: Motts and Martin

ORAL COMMUNICATIONS

Director of Community Development Ebbs confirmed that everyone was going to the Planning Commissioner's Academy and if there were any questions they could contact Tammy. He announced on April 18, 2018, there would be a presentation from the City Attorney's office related to cannabis and it would be followed up in May with a presentation of an ordinance.

In response to Chair Zacharatos, Director of Community Development Ebbs explained there had been language submitted to the City for a ballot initiative that would greatly restrict development and introduce a new process in the Sand Creek focus area. Essentially, all development projects would be subject to a vote of the people except those that developed in extremely low densities. He noted signatures were now being collected and if it made it to the ballot, it would be up to voters to decide. He further noted with respect to The Ranch project, it is going through the process and in all likelihood the project would be before the Planning Commission in late spring or early summer, ahead of the November timeline. He stated if that were the case, his understanding was that it would be a valid approval and development agreement, and language in the ballot initiative was not retroactive. That said, he noted anyone could file a referendum on a project.

WRITTEN COMMUNICATIONS

None.

COMMITTEE REPORTS

None.

ADJOURNMENT

Chair Zacharatos adjourned the Planning Commission at 7:26 P.M. to the next regularly scheduled meeting to be held on April 18, 2018.

Respectfully Submitted,
Kitty Eiden

**STAFF REPORT TO THE PLANNING COMMISSION
FOR CONSIDERATION AT THE MEETING OF APRIL 18, 2018**

Prepared by: Zoe Merideth, Associate Planner *ZM*

Approved by: Alexis Morris, Planning Manager *AM*

Date: April 13, 2018

Subject: Kaiser Solar Project (AR-17-17)

RECOMMENDATION

It is recommended that the Planning Commission approve the design review request subject to the conditions contained in the attached resolution.

REQUEST

The applicant, Ameresco, Inc., requests design review approval of proposed parking canopies with photovoltaic modules attached to the roofs of the structures over a portion of the existing parking lot at Kaiser Permanente Antioch Medical Center. The proposal would require removing existing trees and light poles and replacing the removed landscaping (APNs 057-022-020, 057-022-021, 057-022-194).

ENVIRONMENTAL REVIEW

The project is exempted from California Environmental Quality Act (CEQA) review. Article 5 section 15061(b) of the CEQA Guidelines states, in part, "that CEQA applies only to projects, which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA." In order to determine if the project would have the potential for causing a significant effect on the environment, the applicant provided an arborist report (see Attachment B) and preliminary nesting bird survey report. No active bird nests were found at the project site.

Based on the facts that the site is already developed as a parking lot, all trees to be removed that require mitigation under the Antioch Municipal Code are proposed to be mitigated, and no active bird nests were found on the site, there is certainty that there is no possibility that the proposed parking canopies would have a significant effect on the environment. Therefore, the project is not subject to CEQA.

ANALYSIS

Issue #1: Project Overview

The proposed parking canopies with photovoltaic modules attached to the roofs of the structures would be installed over a portion of the existing parking lot at Kaiser Permanente Deer Valley Hospital (see Attachment A). The canopies would be located in the parking lot to the east of the main hospital building and in the parking lot to the south of Wellness Way. In total, approximately 109,340 square feet of canopies are proposed to be installed. The canopies would not be visible from Deer Valley Road due to the existing buildings and berms with landscaping along the frontage. The view of the canopies from Sand Creek Road would be partially blocked by the existing building, high berms, and existing landscaping, including trees around the site's perimeter. The canopies would be setback a minimum of approximately 300 feet from Sand Creek Road. The canopies would not be visible from the main entrance of the facility due to the alignment of the buildings.

Based on the applicant's project description, Kaiser does not want photovoltaic systems installed on the roofs of the buildings due to maintenance concerns and the need to remove the panels in order to maintain the roof. Additionally, Kaiser would like the vacant land on the site to remain vacant for future development. The parking canopies would offer shaded parking for staff and patients and allow for full sun exposure. Once constructed, the facility would typically be unattended and would passively generate electric power from the sun during daylight hours. Routine monitoring and maintenance is anticipated.

Issue #2: General Plan, Zoning, and Land Use

The General Plan designation for the project site is Sand Creek Focus Area – Mixed Use Medical Facility and the Zoning designation is Planned Development (P-D).

The zoning code does not specifically reference solar projects; however, the California Solar Rights Act of 1978 and California Government Code section 65850.5 limits local government's review of solar projects to ministerial or administrative review. Therefore, this Design Review application only applies to the proposed design changes caused by the canopies to the approved landscaping and parking lot, which were entitled as part of the Planned Development process and subsequent Design Review applications. The Planning Commission does not have discretion over the placement or number of proposed solar panels.

Surrounding land uses and zoning designations are:

North:	Vacant / Planned Development (P-D)
South:	Vacant / Study Area (S)
East:	Vacant and educational use / Planned Development (P-D)
West:	Vacant / Study Area (S)

Issue #3: Site Plan and Improvements

The project would install parking canopies with solar photovoltaic modules on the roofs over portions of the existing parking lot. The canopies would be placed over the existing parking spaces, which would leave the existing drive aisles clear. The column supports would be spaced approximately every twenty feet. The canopies would be 38'-8" wide and vary in length from 128'-9" to 317'. The canopies would be slanted and have a minimum clearance of nine feet and a maximum clearance of 12'-2".

The site is already developed as a landscaped parking lot. In order to accommodate the canopies, existing trees and light standards would need to be removed. The canopies would have lighting installed on the underside of the canopy. A recommended Condition of Approval in the attached resolution would require the lighting plan to meet the Antioch Municipal Code § 9-5.1715 requirement for a minimum illumination of two-foot-candles at ground level. Additionally, the support columns would cause some of the parking spaces to be shorter than a standard sized parking space. These spaces would be striped as "compact," per City standards.

Issue #4: Tree Removal

The project site was planted with a variety of trees as part of the original Kaiser approval. 155 trees are proposed to be removed as part of the project. (Please note that the arborist report shows 156 trees in the tree survey, but ID 124 is missing, which results in 155 trees listed in the arborist report) Eight of these trees are considered "established trees," which means they are at least 10 inches in diameter when measured four and half feet above ground level. The Antioch Municipal Code § 9-5.12 Tree Preservation and Regulation, requires that all established trees that are removed as part of a development application be replaced at a 2:1 ratio with 24-inch box trees. The applicant proposes eight Coastal Live Oak trees and eight Valley Oak trees, for a total of 16 trees, along the northern edge of the facility's eastern parking lot to comply with the replacement requirements.

Issue #5: Landscape Plan

The applicant proposes replacing each tree that would be removed from the landscaping islands with a five gallon plant. Staff has added a recommended Condition of Approval that would require the replacement plants to be the same species of plants already found within the landscaping islands. This condition would maintain the consistency of the site's landscaping. Additionally, the required replacement trees would be 24-inch box trees, per the Antioch Municipal Code requirements.

ATTACHMENTS

- A. Aerial Photograph
- B. Arborist Report

**PLANNING COMMISSION
RESOLUTION NO. 2018-****

**RESOLUTION OF THE CITY OF ANTIOCH PLANNING COMMISSION
APPROVING DESIGN REVIEW FOR THE KAISER PERMANENTE ANTIOCH
MEDICAL CENTER SOLAR PROJECT (AR-17-17)**

WHEREAS, the City received an application from Ameresco, Inc. for Design Review approval for the installation of parking canopies with photovoltaic modules attached to the roofs of the structures over a portion of the existing parking lot at Kaiser Permanente Antioch Medical Center. The project site is located at 4501 Sand Creek Road (APNs 057-022-020, 057-022-021, 057-022-194); and,

WHEREAS, the City of Antioch does determine that this project is exempt from the provisions of CEQA pursuant to CEQA Guideline section 15061 because there is no possibility that the project in question may have a significant effect on the environment; and,

WHEREAS, the Planning Commission duly gave notice of public hearing as required by law; and,

WHEREAS, on April 18, 2018, the Planning Commission duly held a public hearing on the matter, and received and considered evidence, both oral and documentary.

NOW THEREFORE BE IT RESOLVED the Planning Commission of the City of Antioch does hereby **APPROVE** design review of the installation of parking canopies with photovoltaic modules attached to the roofs of the structures over a portion of the existing parking lot at Kaiser Permanente Antioch Medical Center. The project site is located at 4501 Sand Creek Road (APNs 057-022-020, 057-022-021, 057-022-194), subject to the following conditions:

A. GENERAL CONDITIONS

1. The project shall be constructed and operated in compliance with City of Antioch Municipal Code requirements and standards.
2. The site plan shall be corrected to include any conditions required by the Planning Commission which call for a modification or change to the site plan and all standards and requirements of the City of Antioch prior to any submittal for a building permit. No building permit will be issued unless the site plan meets the requirements stipulated by the Planning Commission and the standards of the City.
3. City staff shall inspect the site for compliance with conditions of approval prior to final inspection approval.

4. That this approval expires two years from the date of approval (Expires April 18, 2020), unless a building permit has been issued and construction has diligently commenced thereon and has not expired, or an extension has been approved by the Zoning Administrator. Requests for extensions must be received in writing with the appropriate fees prior to the expiration of this approval. No more than one, one year extension shall be granted.
5. The applicant shall defend, indemnify, and hold harmless the City in any action brought by a third party to challenge the land use entitlement or environmental review. In addition, if there is any referendum or other election action to contest or overturn these approvals, the applicant shall either withdraw the application or pay all City costs for such an election.
6. No permits or approvals, whether discretionary or mandatory, shall be considered if the applicant is not current on fees, reimbursement payments and other fees that are due.
7. The applicant shall obtain an encroachment permit for all work to be done within the public right-of-way.
8. This approval supersedes previous approvals that have been granted for this site.
9. All required easements or rights-of-way for off-site improvements shall be obtained by the applicant at no cost to the City of Antioch. Advance permission shall be obtained from any property or easement holders for any work done within such property or easements.

B. CONSTRUCTION CONDITIONS

1. The use of construction equipment shall be as outlined in the Antioch Municipal Code and is restricted to weekdays between the hours 8:00 A.M. and 5:00 P.M., or as approved in writing by the City Manager. Requests for alternative days/time may be submitted in writing to the City Engineer for consideration.
2. The project shall be in compliance with and supply all the necessary documentation for AMC 6-3.2: Construction and Demolition Debris Recycling.
3. Building permits shall be secured for all proposed construction associated with this facility, including any interior improvements not expressly evident on the plans submitted.

4. Standard dust control methods and designs shall be used to stabilize the dust generated by construction activities. The applicant shall post dust control signage with a contact number of the applicant, City staff, and the air quality control board.

C. FIRE REQUIREMENTS

1. All requirements of the Contra Costa County Fire Protection District shall be met including the comments provided in the District's letter dated March 20, 2018:

- a. Photovoltaic arrays shall not infringe upon and/or over existing required Fire District emergency access roadways. Any plans submitted shall be to scale and clearly show compliance with the following:

Provide emergency apparatus access roadways with all-weather (paved) driving surfaces of not less than 20-feet unobstructed width, and not less than 13 feet 6 inches of vertical clearance, to within 150 feet of travel distance to all portions of the exterior walls of every building. Access shall have a minimum outside turning radius of 45 feet, and must be capable of supporting the imposed fire apparatus loading of 37 tons. (503) CFC

2. The developer shall submit a minimum of two (2) complete sets of plans and specifications of the subject project, including plans for any of the following required deferred submittals, to the Fire District for review and approval **prior to** construction to ensure compliance with minimum requirements related to fire and life safety. Plan review and inspection fees shall be submitted at the time of plan review submittal. (105.4.1) CFC, (901.2) CFC, (107) CBC

- Photovoltaic Plans

D. FEES

1. The applicant shall pay all City fees which have been established by the City Council and as required by the Antioch Municipal Code.

E. PROPERTY MAINTENANCE

1. The project shall comply with Property Maintenance Ordinance AMC § 5-1.204.
2. The site shall be kept clean of all debris (boxes, junk, garbage, etc.) at all times.
3. No signs shall be installed on this site without prior City approval.

4. Any cracked or broken sidewalks shall be replaced as required by the City Engineer.

F. UTILITIES

1. All existing and proposed utilities shall be undergrounded (e.g. transformers and PMH boxes) and subsurface in accordance with the Antioch Municipal Code, except existing P.G.& E. towers, if any, or as approved by the City Engineer.

G. LANDSCAPING

1. Landscape shall show immediate results. Landscaped areas shall be watered, weeded, pruned, fertilized, sprayed, and/or otherwise maintained as necessary. Plant materials shall be replaced as needed to maintain the landscaping in accordance with the approved plans.
2. Landscaping and signage shall not create a sight distance problem.
3. Detailed landscaping and irrigation plans for the project shall be submitted to the City with the building permit plans for review and approval. All landscaping and irrigation shall be installed in accordance with approved plans prior to the issuance of certificates of occupancy for this building.
4. All trees shall be a minimum 15-gallon size and that all shrubs shall be a minimum 5-gallon size. All trees required to be planted for mitigation shall be a minimum 24-inch box size.
5. Landscaping for the project shall be designed to comply with the applicable requirements of the 2015 California State Model Water Efficient Landscape Ordinance (MWELO). Prior to issuance of a building permit, the applicant shall demonstrate compliance with the applicable requirements of the MWELO in the landscape and irrigation plans submitted to the City.

H. SITE AND PROJECT DESIGN

1. All proposed improvements shall be constructed to City standards or as approved by the City Engineer.
2. No permanent structures shall be constructed within any easements.
3. To the maximum extent practicable, columns supporting the solar canopies shall be placed in locations that avoid reducing existing standard and compact parking space dimensions. Per City Code, standard parking spaces are 20' (or 18' with a 2' overhang into landscaping or minimum 6'-wide sidewalk areas) x 9' (L x W).

Compact parking spaces are 16' x 8' (L x W) and are designated by the letter 'C' in thermoplastic striping. Columns supporting the solar canopies shall be located as shown on "NRG-Kaiser Permanente, Solar Photovoltaic Installation, CN 5701 – Antioch Medical Center Deer Valley MOB and CUP" plans, stamped received by City on 2/15/2018, or as approved by the City Engineer. Restriping shall be provided where needed following the installation of the columns.

I. PROJECT SPECIFIC CONDITIONS

1. The photometric plan shall be revised to meet the requirements of Antioch Municipal Code § 9-5.1715, which states, "Outdoor parking area lighting fixture heights shall be determined by their relationship to surrounding uses, and lighting shall not shine directly onto an adjacent street or property. Minimum illumination at ground level shall be two foot-candles."
2. A maximum of 155 trees, as specified on the arborist report, may be removed. The applicant shall mitigate the removal of the established trees with the planting of eight Coastal Live Oak trees and eight Valley Oak trees, for a total of 16 trees, as shown on the project plans. Any additional tree removals shall be approved by the Zoning Administrator prior to removal, and the trees shall be mitigated in accordance with Antioch Municipal Code § 9-5.12 Tree Preservation and Regulation.
3. The landscape plans submitted with the building permit plans shall be revised to be consistent with the provided site plans and tree removal plans, including the canopy outlines.
4. The landscape plans submitted with the building permit plans shall be revised to show plants that are of the same type as the existing landscaping plants at the project site.
5. A preliminary title report shall be submitted with the building permit submittal.

* * * * *

I HEREBY CERTIFY the foregoing resolution was duly adopted by the Planning Commission of the City of Antioch, County of Contra Costa, State of California, at a regular meeting of said Planning Commission held on the 18th day of April, 2018.

AYES:

NOES:

ABSTAIN:

ABSENT:

Forrest Ebbs
Secretary to the Planning Commission

ATTACHMENT “A”

Attachment A – Aerial Photograph



ATTACHMENT “B”



November 26, 2017

Tyge Nason
Project Manager
Ameresco, Inc.
60 E. Rio Salado Parkway
Suite 1001
Tempe, AZ 85281

Subject: Tree Evaluation for Kaiser Permanente Antioch, California

Dear Tyge,

Thank you for asking me to provide a Consulting Arborist Report for the proposed Solar Photovoltaic project for the Kaiser Permanente located at 4501 Sand Creek Road, Antioch, California. The trees I evaluated are in the parking lot islands throughout the parking lot. The set of drawings I used are from the DLR Group that shows which trees are being impacted by the proposed solar panel structures. Page G-120 identifies the trees using a circle with T symbol on an aerial map

I visited the site on November 21, 2017 and inspected all 155 of the (6) different species of trees in the parking lot islands. While the numbering scheme in the associated table below ends at 156, I made an identification error while in the field that required the nullification of ID #124; therefore there is no tree #124 on the map, the table, or in the field. The correct number of trees stands at 155 in all associated documents. Following are my findings:

The Canary Island pine trees (*Pinus* spp.) range in size from 9 to 15 inch in diameter at breast height. These trees have outgrown their life span in the parking lot islands. While these appear to be healthy, the roots are starting to lift the asphalt and concrete gutters in some areas.

The Chinese flame trees (*Koeleruteria* spp.) identified in our latest inventory are mostly in poor health. The size of these trees varies from 2 to 7 inches in diameter at breast height, and most of these trees are not receiving adequate irrigation. Additionally compaction, pest intrusion, and sunscald have severely impacted the trees' health.

The holly oaks (*Quercus* spp.), found throughout the parking lot islands, are mostly in good health and range in size from 5 to 9 inches in diameter at breast height. While these trees appear to be in good health now, their placement in parking lot islands - where heat from the asphalt can reach sweltering temperatures – is not a long term recipe for success. As these trees begin to age, I would expect them to become increasingly vulnerable to sucking insects and other diseases, mostly due to the stresses associated with heat discussed above.

The Bradford pears (*Pyrus* spp.) identified in our latest inventory range in size from 8.9 to 10.1 inches in diameter at breast height. These trees appear to be in good health but the long term prognosis for trees of this type in parking lot islands is not great. Pear trees typically have a short life span of 6 to 10 years before the roots start to decline. Additionally, pear trees are prone to fire blight infection, a vascular disease ubiquitous throughout the bay area, and

Bob Peralta
ISA Certified Arborist, WE-7150A
BrightView Tree Care Services
4677 Pacheco Blvd
Martinez, CA - 94553
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925-957-8833 fax

without healthy soil, adequate irrigation, and a larger area to grow in the trees decline rapidly or start to damage hardscape that will likely cause tripping hazards.

The common hackberry trees (*Celtis* spp.) we identified and plotted in our latest inventory are mostly in good health but are quite small. The size of these trees vary from 1.5 to 8 inches in diameter at breast height. I suspect that while most of these trees are in good health now, the reason they remain small is due to the less than ideal growing conditions of parking lot islands, where as we discussed earlier, heat can become so high that photosynthesis stops. I would expect these trees to decline rapidly as they age.

The final tree we identified in our latest trip to the property is the upright European pyramidal hornbeam (*Carpinus* spp.). These trees range in size from a combined diameter at breast height of 2 to 6 inches and range in health from dead to good. From what I was able to observe, the trees of this species that were in less than good condition were so because of lack of proper irrigation. Overall, these trees are an acceptable choice for their location, provided they receive adequate water.

In terms of any replacement trees required by the city of Antioch for mitigation, I recommend trees that are better suited for the micro-climate of Antioch. The property has multiple areas to install a mixture of Live oaks (*Quercas agrifolia*) and Valley oaks (*Quercas lobata*) where ample space is available. Where space is limited, such as under the solar panels and in parking lot islands I recommend five gallon podocarpus macrophyllus 'maki' and five gallon *Pittosporum tobia* variegate.

As always, it is my pleasure to assist you with this project. Please give me a call if you have any questions or if I can assist in any other way.

Sincerely,

Bob Peralta

Bob Peralta
Certified Arborist WE-7150A
ASCA Consulting Arborist #505

ID	Species	Health	DBH -- Inches	Note	Lat	Lon
1	holly oak	80% - Good	5		37.95	-122
2	common hackberry	80% - Good	5.5		37.95	-122
3	holly oak	80% - Good	6		37.95	-122
4	common hackberry	80% - Good	8.2		37.95	-122
5	common hackberry	80% - Good	8.5		37.95	-122
6	holly oak	80% - Good	6		37.95	-122
7	Chinese flame tree	40% - Poor	3		37.95	-122
8	common hackberry	40% - Poor	3		37.95	-122
9	Chinese flame tree	40% - Poor	2		37.95	-122
10	Chinese flame tree	40% - Poor	2.5		37.95	-122
11	Chinese flame tree	40% - Poor	4		37.95	-122
12	Chinese flame tree	40% - Poor	4.2		37.95	-122
13	Chinese flame tree	40% - Poor	4		37.95	-122
14	Chinese flame tree	40% - Poor	3.8		37.95	-122
15	Chinese flame tree	60% - Fair	5		37.95	-122
16	Chinese flame tree	60% - Fair	3.5		37.95	-122
17	Chinese flame tree	60% - Fair	6.1		37.95	-122
18	common hackberry	80% - Good	6		37.95	-122
19	common hackberry	80% - Good	5		37.95	-122
20	common hackberry	80% - Good	5		37.95	-122
21	common hackberry	80% - Good	6		37.95	-122
22	common hackberry	80% - Good	5		37.95	-122
23	common hackberry	80% - Good	6		37.95	-122
24	common hackberry	80% - Good	6		37.95	-122
25	common hackberry	80% - Good	6		37.95	-122
26	holly oak	80% - Good	9.4		37.95	-122
27	holly oak	80% - Good	8.9		37.95	-122
28	holly oak	80% - Good	8		37.95	-122
29	holly oak	80% - Good	7.9		37.95	-122
30	holly oak	80% - Good	8		37.95	-122
31	holly oak	80% - Good	6.8		37.95	-122
32	holly oak	80% - Good	8		37.95	-122
33	holly oak	80% - Good	9.7		37.95	-122
34	holly oak	80% - Good	8		37.95	-122
35	holly oak	80% - Good	7		37.95	-122
36	holly oak	80% - Good	8.5		37.95	-122
37	holly oak	80% - Good	8		37.95	-122
38	holly oak	80% - Good	6		37.95	-122
39	holly oak	80% - Good	9.4		37.95	-122
40	holly oak	80% - Good	7.5		37.95	-122
41	Canary Island pine	90% - Very Good	11.5		37.95	-122
42	Canary Island pine	90% - Very Good	9		37.95	-122
43	Canary Island pine	90% - Very Good	12 (multi-trunk)		37.95	-122
44	Canary Island pine	90% - Very Good	9		37.95	-122
45	Canary Island pine	90% - Very Good	10		37.95	-122

46	Canary Island pine	90% - Very Good	9.7		37.95	-122
47	Canary Island pine	90% - Very Good	14 (Multi-trunk)		37.95	-122
48	Canary Island pine	90% - Very Good	11.9		37.95	-122
49	Canary Island pine	90% - Very Good	13		37.95	-122
50	Canary Island pine	90% - Very Good	15		37.95	-122
51	holly oak	80% - Good	4		37.95	-122
52	holly oak	80% - Good	8.9		37.95	-122
53	holly oak	80% - Good	5		37.95	-122
54	holly oak	80% - Good	4.5		37.95	-122
55	holly oak	80% - Good	5		37.95	-122
56	holly oak	80% - Good	8		37.95	-122
57	holly oak	80% - Good	7.5		37.95	-122
58	holly oak	80% - Good	4		37.95	-122
59	holly oak	80% - Good	5		37.95	-122
60	common hackberry	60% - Fair	1.5		37.95	-122
61	Chinese flame tree	60% - Fair	3		37.95	-122
62	Chinese flame tree	60% - Fair	6		37.95	-122
63	Chinese flame tree	60% - Fair	1.5		37.95	-122
64	Chinese flame tree	60% - Fair	2.9		37.95	-122
65	European hornbeam	80% - Good	2.3		37.95	-122
66	European hornbeam	80% - Good	2.5		37.95	-122
67	European hornbeam	80% - Good	3		37.95	-122
68	European hornbeam	80% - Good	3.5		37.95	-122
69	European hornbeam	80% - Good	3		37.95	-122
70	European hornbeam	80% - Good	3.7		37.95	-122
71	European hornbeam	80% - Good	4.1		37.95	-122
72	European hornbeam	80% - Good	4		37.95	-122
73	European hornbeam	80% - Good	6		37.95	-122
74	European hornbeam	80% - Good	4.2		37.95	-122
75	European hornbeam	80% - Good	3		37.95	-122
76	European hornbeam	80% - Good	3.9		37.95	-122
77	European hornbeam	80% - Good	2.9		37.95	-122
78	European hornbeam	80% - Good	2.2		37.95	-122
79	European hornbeam	80% - Good	2.9		37.95	-122
80	European hornbeam	0% - Dead	2.6		37.95	-122
81	European hornbeam	40% - Poor	3		37.95	-122
82	European hornbeam	60% - Fair	7		37.95	-122
83	European hornbeam	60% - Fair	3		37.95	-122
84	European hornbeam	60% - Fair	2		37.95	-122
85	common hackberry	60% - Fair	2.2		37.95	-122
86	holly oak	60% - Fair	5		37.95	-122
87	holly oak	80% - Good	7		37.95	-122
88	holly oak	80% - Good	4.5		37.95	-122
89	holly oak	80% - Good	5.4		37.95	-122
90	Chinese flame tree	80% - Good	6.6		37.95	-122
91	Chinese flame tree	80% - Good	6.5		37.95	-122

92	Chinese flame tree	60% - Fair	4.6		37.95	-122
93	Chinese flame tree	60% - Fair	2.7		37.95	-122
94	common hackberry	40% - Poor	3		37.95	-122
95	common hackberry	80% - Good	2		37.95	-122
96	common hackberry	80% - Good	3		37.95	-122
97	holly oak	80% - Good	6.8		37.95	-122
98	holly oak	80% - Good	6.2		37.95	-122
99	holly oak	80% - Good	8		37.95	-122
100	holly oak	80% - Good	6.4		37.95	-122
101	holly oak	80% - Good	8.7		37.95	-122
102	holly oak	80% - Good	8.6		37.95	-122
103	holly oak	80% - Good	7.5		37.95	-122
104	holly oak	80% - Good	3.5		37.95	-122
105	holly oak	80% - Good	7		37.95	-122
106	holly oak	80% - Good	7		37.95	-122
107	holly oak	80% - Good	6		37.95	-122
108	holly oak	80% - Good	6.2		37.95	-122
109	common hackberry	80% - Good	5.6		37.95	-122
110	holly oak	80% - Good	5.2		37.95	-122
111	holly oak	80% - Good	6.5		37.95	-122
112	holly oak	80% - Good	7.6		37.95	-122
113	holly oak	80% - Good	7.5		37.95	-122
114	holly oak	80% - Good	7.6		37.95	-122
115	holly oak	80% - Good	6.8		37.95	-122
116	holly oak	80% - Good	4		37.95	-122
117	holly oak	80% - Good	6.9		37.95	-122
118	common hackberry	80% - Good	3		37.95	-122
119	Bradford Callery pear	80% - Good	10.1		37.95	-122
120	Bradford Callery pear	80% - Good	9		37.95	-122
121	holly oak	80% - Good	8.7		37.95	-122
122	holly oak	80% - Good	9.6		37.95	-122
123	holly oak	80% - Good	9.5		37.95	-122
125	European hornbeam	60% - Fair	3		37.95	-122
126	European hornbeam	80% - Good	3		37.95	-122
127	European hornbeam	80% - Good	2.5		37.95	-122
128	European hornbeam	80% - Good	2		37.95	-122
129	European hornbeam	80% - Good	3		37.95	-122
130	European hornbeam	80% - Good	2.5		37.95	-122
131	European hornbeam	80% - Good	2		37.95	-122
132	European hornbeam	80% - Good	2		37.95	-122
133	European hornbeam	80% - Good	2		37.95	-122
134	European hornbeam	80% - Good	2		37.95	-122
135	holly oak	80% - Good	7.5		37.95	-122
136	holly oak	80% - Good	8.2		37.95	-122
137	holly oak	80% - Good	6.9		37.95	-122
138	holly oak	80% - Good	7		37.95	-122

139	holly oak	80% - Good	7		37.95	-122
140	holly oak	80% - Good	7		37.95	-122
141	holly oak	80% - Good	7.2		37.95	-122
142	Bradford Callery pear	80% - Good	9		37.95	-122
143	Bradford Callery pear	80% - Good	9		37.95	-122
144	Bradford Callery pear	80% - Good	8.9		37.95	-122
145	Bradford Callery pear	80% - Good	9		37.95	-122
146	holly oak	80% - Good	8.9		37.95	-122
147	holly oak	80% - Good	7.6		37.95	-122
148	holly oak	80% - Good	9.8		37.95	-122
149	holly oak	80% - Good	3		37.95	-122
150	European hornbeam	90% - Very Good	3.7		37.95	-122
151	European hornbeam	90% - Very Good	6		37.95	-122
152	European hornbeam	90% - Very Good	5		37.95	-122
153	European hornbeam	90% - Very Good	2		37.95	-122
154	European hornbeam	90% - Very Good	2.3		37.95	-122
155	European hornbeam	90% - Very Good	2		37.95	-122
156	European hornbeam	90% - Very Good	3		37.95	-122



Species (155)



- holly oak (14/65)
- European hornbeam (17/37)
- Bradford Callery pear (6/6)





- Species (155)**
- holly oak (51/65)
 - European hornbeam (20/37)
 - common hackberry (19/19)
 - Chinese flame tree (18/18)
 - Canary Island pine (10/10)

**STAFF REPORT TO THE PLANNING COMMISSION
FOR CONSIDERATION AT THE MEETING OF APRIL 18, 2018**

Prepared by: Kevin Scudero, Associate Planner 
Reviewed by: Alexis Morris, Planning Manager 
Date: April 13, 2018
Subject: **AR-18-04 – Mesa Billboard Digital Display Upgrade**

RECOMMENDATION

Staff recommends that the Planning Commission **APPROVE AR-18-04** for the upgrade of the west facing section of the existing billboard at Delta Fair Boulevard and Century Boulevard from a static display to a digital display.

REQUEST

Mesa Outdoor is requesting design review approval to upgrade the west facing portion of their existing billboard from a static display to a digital display. The project site is located on the northeast corner of Delta Fair Boulevard and Century Boulevard (Attachment "A") (**APN 074-080-029**).

ENVIRONMENTAL

The proposed project is considered exempt from environmental review pursuant to the California Environmental Quality Act (CEQA) Guidelines section 15301-Existing Facilities.

ANALYSIS

Issue #1: Project Overview

On October 16, 2013, the Planning Commission approved Resolution No. 2013-14 (Attachment C) allowing the construction of the billboard that is currently at the site. The site is owned by the City of Antioch and leased to Mesa Billboard for the operation of their billboard. The City of Antioch also leases the site on a seasonal basis to a pumpkin patch and Christmas tree farm which are not impacted by the operation of the billboard.

The applicant's original proposal showed a static display on all sides of the billboard and the use permit required that any modification to the proposed project be brought back to the Planning Commission for review and approval. Therefore, the applicant has

requested design review approval from the Planning Commission to convert the west facing portion of the billboard from a static to digital display.

The addition of the digital display will not increase the height or footprint of the existing billboard. The new digital display will basically be identical to the digital billboard nearby in Pittsburg located across Century Boulevard which is also owned and operated by Mesa Billboard. The digital display will show the advertisements for eight seconds at a time with eight total advertisements running in a rotation. The applicant has obtained all of the necessary Cal-Trans permits (Attachment E) for the operation of a digital billboard at this site.

Issue #2: General Plan, Zoning and Land Use

The site has a zoning designation of High Density Residential (R-35), which allows for billboards with the approval of a use permit. As discussed above, the use permit for this billboard was approved by the Planning Commission in 2013.

The surrounding land use and zoning designations are:

North:	State Route 4
South:	Vacant Land and Contra Costa County offices / Mixed Commercial/Residential (MCR), High Density Residential (R-35)
East:	Vacant Land, Solar Farm / Regional Commercial (C-3)
West:	Vacant Land and the City of Pittsburg /Regional Commercial (C-3)

Issue #3: Lighting

The proposed digital upgrade will not significantly change the current lighting dispersion on the property. The current static billboard is illuminated with flood lights that disperse light at the same intensity regardless of how dark it is outside. The new digital display will sense how dark the surroundings are and dim the display to an appropriate level. The digital display will be an LED sign, which the applicant claims is an advantage in an urban setting because LED signs are highly directional and can be directed more precisely to the intended audience. The applicant has submitted a detailed lighting study (Attachment B) that details the intensity of the light and how it will be dispersed from the billboard.

ATTACHMENTS

- A: Vicinity Map
- B: Lighting Study
- C: Planning Commission Resolution No. 2013-14
- D: Project Description
- E: Cal-Trans Permit

**CITY OF ANTIOCH PLANNING COMMISSION
RESOLUTION NO. 2018-****

**RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ANTIOCH
APPROVING DESIGN REVIEW FOR THE UPGRADE OF AN EXISTING FREEWAY
BILLBOARD TO A DIGITAL DISPLAY LOCATED ON THE NORTHEAST CORNER
OF DELTA FAIR BOULEVARD AND CENTURY WAY**

WHEREAS, the Planning Commission of the City of Antioch did receive a request from Mesa Outdoor for design review approval to upgrade the existing freeway billboard to a digital display, located on the northeast corner of Delta Fair Boulevard and Century Boulevard (**AR-18-04**) (**APN: 074-080-029**); and,

WHEREAS, this project is exempt from the provisions of CEQA pursuant to CEQA Guideline section 15301- Existing Facilities; and,

WHEREAS, the Planning Commission on October 16, 2013, duly held a public hearing, and approved the project in Planning Commission Resolution No. 2013-14; and

WHEREAS, the Planning Commission on April 18, 2018, duly held a hearing, received and considered evidence, both oral and documentary.

NOW THEREFORE BE IT RESOLVED that the Planning Commission of the City of Antioch does hereby **APPROVE AR-18-04** for the upgrade of the existing billboard at the northwest corner of Delta Fair Boulevard and Century Way from a static display to a digital display, subject to the following conditions:

STANDARD CONDITIONS

1. The City of Antioch Municipal Code shall be complied with.
2. Building permits shall be obtained prior to installation of signage.
3. City staff shall inspect the site for compliance with conditions of approval prior to final inspection.
4. Conditions required by the Planning Commission, which call for a modification or any change to the site plan submitted, shall be corrected on the project plans to show those conditions and all standards and requirements of the City of Antioch prior to any submittal for a building permit. No building permits will be issued unless the site plan meets the requirements stipulated by the Planning Commission and standards of the City.

5. That this approval expires two years from the date of approval (Expires: April 18, 2020), unless a building permit has been issued and construction has diligently commenced thereon and has not expired, or an extension has been approved by the Zoning Administrator. Requests for extensions must be received in writing with the appropriate fees prior to the expiration of this approval. No more than one, one year extension shall be granted.
6. The sign shall not encroach into the City's public right-of-way and shall not be placed within any easements.
7. The applicant shall defend, indemnify and hold harmless the City in any action brought by a third party to challenge the land use entitlement.
8. No permits or approvals, whether discretionary or mandatory, shall be considered if the applicant is not current on fees, reimbursement payments and any other payments that are due.

PROJECT SPECIFIC CONDITIONS

9. All conditions contained in Planning Commission Resolution No. 2013-14 are still applicable to the site unless modified herein.
10. The west facing portion of the billboard shall be allowed to have a digital display as described in the applicants project description submitted to the City of Antioch on January 26, 2018.
11. Any future modifications to the billboard display shall be subject to the review and approval of the Zoning Administrator.

* * * * *

I HEREBY CERTIFY the foregoing resolution was duly adopted by the Planning Commission of the City of Antioch, County of Contra Costa, State of California, at a regular meeting of said Planning Commission held on the 18th of April, 2018.

AYES:

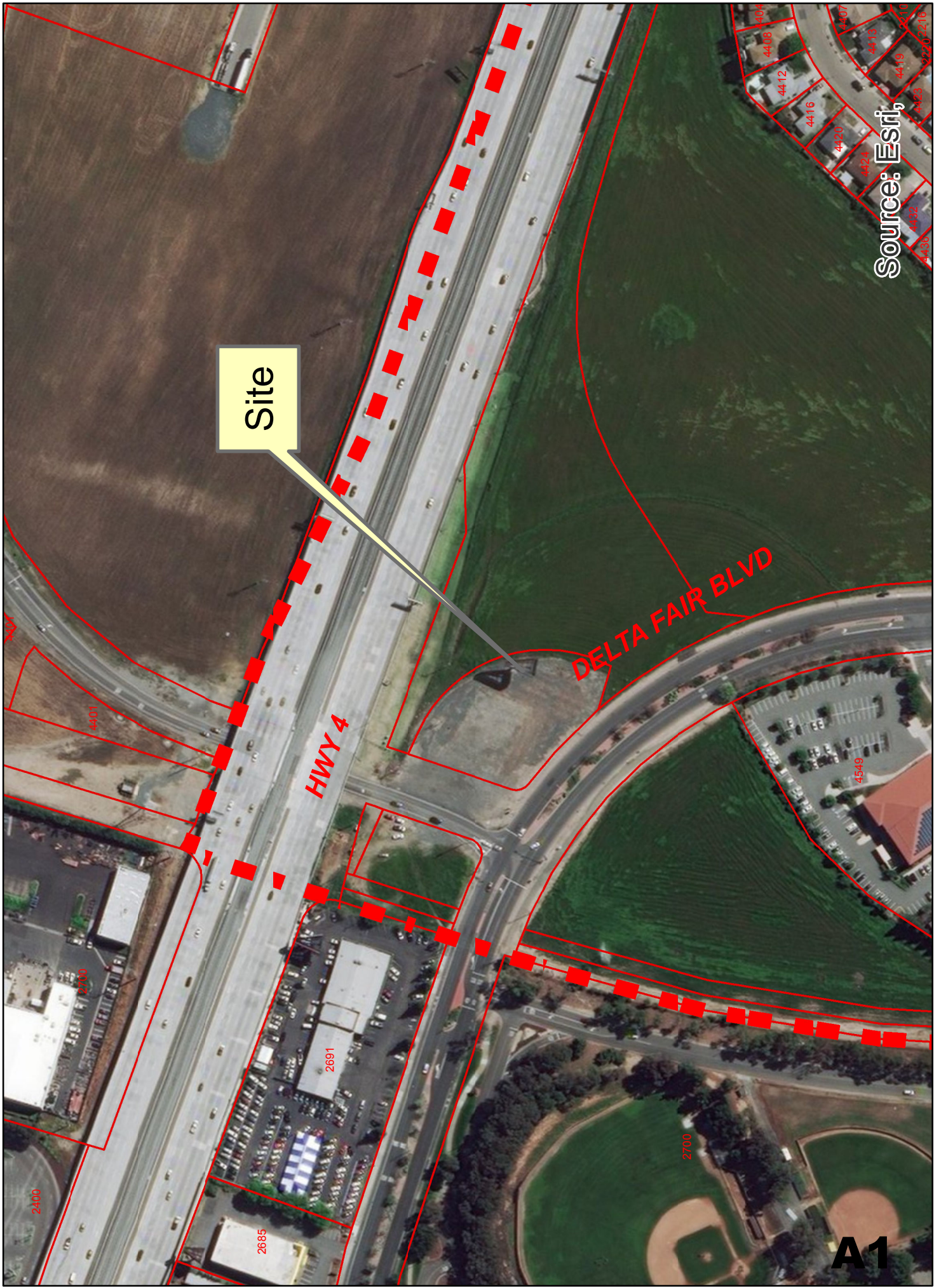
NOES:

ABSTAIN:

ABSENT:

Forrest Ebbs
Secretary to the Planning Commission

ATTACHMENT “A”



Source: Esri



City of Antioch GIS

Vicinity Map

A1

ATTACHMENT “B”

January 19, 2018

Background on Optical Measurements and Calculations

Watchfire Signs has manufactured outdoor electric signs since 1932 and led signs since 1996. We have more than 50,000 led signs in operation worldwide.

Incandescent signs were commonly measured using illuminance measurements, partly because the light bulb is ideally a point source of light, illuminating equally in all directions, and illuminance meters are commonly available and inexpensive. Foot-candle measurements are made at a defined distance from the sign and the magnitude depends on the physical size of the sign.

LED signs are highly directional however, which is an advantage in an urban setting since the light can be directed more precisely to the intended audience. Luminance measurements have been used to specify LED signs by the industry. The candela per square meter (NITs) unit allows a specification that does not depend on size or viewing distance.

The study done on the sign adjacent to a residential area used actual lab measurements made on modules using an illuminance meter. These measurements and extrapolations are then scaled up to the size of the sign and the distance corrections are made using the inverse square law.

Watchfire adopted brightness standards set forth by both the ISA (International sign Association) and OAAA (Outdoor Advertising Association of America). The standards used are based on the studies of Dr. Lewin and the IESNA (Illuminating Engineering Society of North America).

Below is a list of some of the measurement equipment used by Watchfire engineers.

Equipment used by Watchfire engineers to make lighting measurements:

Foot-candles/Lux - Minolta Illuminance Meter T-10

NITs/candela/sq. m – Minolta Luminance Meter LS-100

Sign Calibration – Minolta CS-1000 Spectra radiometer

SIGN LIGHTING STUDY

Sign Details

Size: 14x48 Digital Billboard

Location: 4650 Delta Fair Blvd, Antioch, CA 94509

Light measurements are completed in foot-candles. A foot-candle is the amount of light produced by a single candle when measured from 1 foot away. For reference, a 100-watt light bulb produces 137 foot-candles at 1 foot away, .0548 foot-candles at 50 feet and .0137 foot-candles at 100 feet.

The table represents the total increase in ambient light produced by the sign under normal or typical operation at night. The ambient light increases will be less than shown in the chart since they fail to consider any objects blocking the line of site to the sign. Obstructions such as trees would further reduce real world overall ambient light increases. In addition to obstructions any existing light within the viewing cone will further diminish any light increase.

	0 degrees	20 degrees	40 degrees	60 degrees	90 degrees
100'	0.6814	0.5621	0.3795	0.1717	0.0341
200'	0.1703	0.1405	0.0949	0.0429	0.0085
300'	0.0757	0.0625	0.0422	0.0191	0.0038
400'	0.0426	0.0351	0.0237	0.0107	0.0021
500'	0.0273	0.0225	0.0152	0.0069	0.0014

Light values in foot-candles at night under typical operation



Conclusion

Given the above comparisons and measurements, the area will see an almost undetectable difference in ambient light after installation of a billboard. Ambient light levels are more heavily impacted by street, building, and landscape lights than the increases produced by a billboard.

Ray Digby

office 800-637-2645 x3006 Fax 217-442-1020

ray.digby@watchfiresigns.com

ATTACHMENT “C”

**CITY OF ANTIOCH PLANNING COMMISSION
RESOLUTION NO. 2013-14**

**RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ANTIOCH
APPROVING A USE PERMIT FOR A FREEWAY BILLBOARD LOCATED ON THE
NORTHEAST CORNER OF DELTA FAIR BOULEVARD AND CENTURY WAY**

WHEREAS, the Planning Commission of the City of Antioch did receive a request from Mesa Outdoor for a use permit for a freeway billboard, located on the northeast corner of Delta Fair Boulevard and Century Way (UP-13-07) (APN: 074-080-029); and,

WHEREAS, this project is exempt from the provisions of CEQA pursuant to CEQA Guideline section 15303; and,

WHEREAS, the Planning Commission duly gave notice of public hearing as required by law; and,

WHEREAS, the Planning Commission on October 16, 2013, duly held a hearing, received and considered evidence, both oral and documentary.

NOW THEREFORE BE IT RESOLVED, that the Planning Commission makes the following required findings for approval of a Use Permit:

1. The granting of such use permit will not be detrimental to the public health or welfare or injurious to the property or improvements in such zone or vicinity.

The proposed project will not be detrimental to the public health or welfare or injurious to the property or improvements. The billboard will not have any impacts to the public because the lighting will not produce any glare and the sign is designed in an aesthetically pleasing manner.

2. The use applied at the location indicated is properly one for which a use permit is authorized.

The zoning designation for the project site is commercial and surrounding area is developed with commercial uses and State Route 4. Billboards require a use permit within the Regional Commercial (C-3) zone.

3. That the site for the proposed use is adequate in size and shape to accommodate such use, and all yards, fences, parking, loading, landscaping, and other features required, to other uses in the neighborhood.

The site is currently a vacant parcel. The site is adequate in size and shape to accommodate both the existing seasonal businesses as well as all aspects associated with the use. All yards, fences, parking, loading, landscaping and other required features, as conditioned, meet the requirements of the zoning code standards and are comparable to the surrounding uses in the area.

4. That the site abuts streets and highways adequate in width and pavement type to carry the kind of traffic generated by the proposed use.

The project site is bounded by Delta Fair Boulevard and Century Way. Both streets are adequate for the minimal traffic associated with the proposed use.

5. That the granting of such use permit will not adversely affect the comprehensive General Plan.

The General Plan designation is Office within the Western Gateway Focus Area. The proposed commercial use is consistent with the designation and with the surrounding uses and will not adversely affect the comprehensive General Plan.

NOW THEREFORE BE IT RESOLVED that the Planning Commission of the City of Antioch does hereby **APPROVE UP-13-07** approving a freeway billboard on the northwest corner of Delta Fair Boulevard and Century Way, subject to the following conditions:

STANDARD CONDITIONS

1. The City of Antioch Municipal Code shall be complied with.
2. Building permits shall be obtained prior to installation of signage.
3. City staff shall inspect the site for compliance with conditions of approval prior to final inspection.

4. Conditions required by the Planning Commission, which call for a modification or any change to the site plan submitted, shall be corrected to show those conditions and all standards and requirements of the City of Antioch prior to any submittal for a building permit. No building permits will be issued unless the site plan meets the requirements stipulated by the Planning Commission and standards of the City.
5. That this approval expires two years from the date of approval (Expires: October 16, 2015), unless a building permit has been issued and construction has diligently commenced thereon and has not expired, or an extension has been approved by the Zoning Administrator. Requests for extensions must be received in writing with the appropriate fees prior to the expiration of this approval. No more than one, one year extension shall be granted.
6. Any deviation from the proposed project will be brought back to the Planning Commission for review and approval.
7. The sign shall not encroach into the City's public right-of-way and shall be placed outside of any easements.
8. The applicant shall defend, indemnify and hold harmless the City in any action brought by a third party to challenge the land use entitlement.
9. No permits or approvals, whether discretionary or mandatory, shall be considered if the applicant is not current on fees, reimbursement payments and any other payments that are due.

PROJECT SPECIFIC CONDITIONS

10. The maximum height of the billboard from finished grade shall be 50 feet.
11. The color of the light fixtures shall match the color of the billboard structure.
12. The solar equipment and the interior of the billboard structure shall be screened from public view, subject to staff review and approval.
13. The sign shall be kept clean and free of dirt. The sign shall be painted every seven years or when the sign has visible signs of wear and tear, whichever comes first.
14. Graffiti shall be removed within 10 days and shall be repainted to match the color of the billboard structure.

15. The billboard structure shall be painted a darker color to blend into the background, subject to staff review and approval.

* * * * *

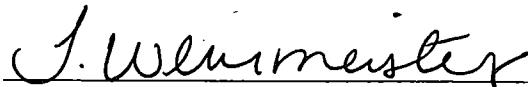
I HEREBY CERTIFY the foregoing resolution was duly adopted by the Planning Commission of the City of Antioch, County of Contra Costa, State of California, at a regular meeting of said Planning Commission held on the 16th of October, 2013.

AYES: Hinojosa, Motts, Baatrup, Miller and Pinto

NOES: None

ABSTAIN: None

ABSENT: Westerman



Tina Wehrmeister

Secretary to the Planning Commission

ATTACHMENT “D”

Digital Display Upgrade



4650 Delta Fair Blvd
Antioch, CA 94509
APN: 074-080-029



Contact Information

Applicant:

Mesa Antioch, LLC
696 San Ramon Valley Blvd #192
Danville, CA 94526
mmccoy@mesaoutdoor.com
rlewis@mesaoutdoor.com
(925) 386-6372

Property Owner:

City of Antioch
Third and H Street
Antioch, CA 94509
(925) 779-6168

1.0 Project Description

Mesa Outdoor proposes to upgrade the west face of its existing billboard located on city owned property into a digital display. No changes in the structure height, dimensions or character/appearance are necessary. This project does not interfere with any existing signs, or require the elimination, modification, or reclassification of any buildings, trees, or structures. This project will not have a significant impact on the environment or the residents of the city. The sign is currently permitted by Caltrans to operate as a digital display (OF04-0034, OF04-0035).

2.0 Property Location Map – 4650 Delta Fair Blvd. | Antioch, CA 94509



2.1 Property Description

The property is located in a Commercial area on the south side of Highway 4 bordering the City of Pittsburg. Surrounding uses are predominantly commercial. The property is currently used seasonally for pumpkin patch sales and Christmas tree lot sales. The property is undeveloped and currently zoned Commercial.

2.2 Property Satellite Image



Google Earth 3/2017



3.0 Visual Impacts & Mitigations

Great care was taken in the selection of the property and design of site location to minimize impacts on the scenic view sheds of Antioch. Our proposed property is located outside of Caltrans designated “Scenic Highway” and “Landscaped Freeway” sections of the City. The property is located in a Commercial/Industrial area amongst view sheds that have already been developed into uses including shopping centers, auto dealers and industrial facilities.

3.1 Lighting Impacts

The proposed digital upgrade will not significantly change the current lighting dispersion on the property. There are no residents or businesses located to the west of the sign within 500 feet, and due to the zoning of the surrounding properties there will never be residents located within 500 feet of the sign. See **Lighting Study**.

3.2 Graffiti Control

The sign is not accessible without a lift truck. We have not experienced any issues with graffiti and we do not expect graffiti to be an issue going forward. We will vigilantly monitor graffiti on the sign and swap out impacted vinyls and paint over any graffiti that occurs on the structure.

3.3 Existing Business Impact

The sign will not impact the existing pumpkin patch and Christmas tree lot as the sign will be located behind the sales area that customers use.

4.0 Structure Description

The structure consists of two 14’ x 48’ advertising display faces, supported by a center-mounted 33’ column and an overall height of 50’ with a 30-degree V. These design specifications provide a desirable aspect ratio for freeway viewing. The size and design are customized to fit the property and serve the traveling public. The structure is composed of steel. The structure is cemented underground to provide a secure foundation and minimize the structure’s footprint. All structural calculations will be signed and sealed by a registered professional engineer. The structure and installation will comply with all applicable building and electrical codes.

5.0 Digital Equipment

We are proposing to install a 14’x48’ Watchfire digital display with high definition 19mm pixel spacing. Watchfire is a US-based company that is considered the gold standard in digital displays. The display’s color uniformity, brightness, and clarity will be guaranteed for ten years. The digital equipment will be basically identical to the equipment used on the neighboring digital display in Pittsburg, CA.

6.0 Roadside Photograph



January 23, 2018

7.0 Site Photographs



Facing East, January 23, 2018



Facing North, January 23, 2018



Facing West, January 23, 2018



Facing South, January 23, 2018



Facing East towards the West face that will be upgraded, January 23, 2018

ATTACHMENT “E”

OUTDOOR ADVERTISING PERMIT

ODA-0013 (REV 09/2017)

IMPORTANT INFORMATION - PLEASE READ CAREFULLY

Pursuant to the terms of Chapter 32, Status of 1939 and as amended, permission is granted to place and maintain an advertising display in its approved physical location as shown in the official records of the Department. Permit renewal is subject to the laws and implementing regulations of the California State Outdoor Advertising Act. This permit does not authorize placement or maintenance of a display prohibited by law or by an ordinance of any city, county or city and county. The permit owner is responsible for permit renewal on or before the expiration date. Immediately notify the Department to correct your mailing address, transfer ownership of this permit or cancel this permit. Include your permit number and mail notices to:

Department of Transportation, Office of Outdoor Advertising, P.O. Box 942874, MS-369, Sacramento, CA

Permit

OF04-0034

Expiration Date

12/31/2018



District	County	Route	Post Mile or County Road	Property Owner
4	CC	4	25.04 R	City of Antioch
Permit Owner Name			Date Granted	Owner Display #
Mesa Outdoor LLC 696 San Ramon Valley Blvd #192 Danville, CA 94526			04/06/2012	

Notice Failure to maintain a current permit may result in a violation notice, penalty and removal of display at permittee's expense. The permit entitles the holder to play the permitted display for the term of this permit provided all fees or pro rata fees are timely received.

OUTDOOR ADVERTISING PERMIT

ODA-0013 (REV 09/2017)

2014-2018 PERMIT YEARS**IMPORTANT INFORMATION - PLEASE READ CAREFULLY**

Pursuant to the terms of Chapter 32, Status of 1939 and as amended, permission is granted to place and maintain an advertising display in its approved physical location as shown in the official records of the Department. Permit renewal is subject to the laws and implementing regulations of the California State Outdoor Advertising Act. This permit does not authorize placement or maintenance of a display prohibited by law or by an ordinance of any city, county or city and county. The permit owner is responsible for permit renewal on or before the expiration date. Immediately notify the Department to correct your mailing address, transfer ownership of this permit or cancel this permit. Include your permit number and mail notices to:

Department of Transportation, Office of Outdoor Advertising, P.O. Box 942874, MS-369, Sacramento, CA

Permit

OF04-0035

Expiration Date

12/31/2018



District	County	Route	Post Mile or County Road	Property Owner
4	CC	4	25.04 R	City of Antioch
Permit Owner Name			Date Granted	Owner Display #
Mesa Outdoor LLC 696 San Ramon Valley Blvd #192 Danville, CA 94526			04/06/2012	

Notice Failure to maintain a current permit may result in a violation notice, penalty and removal of display at permittee's expense. The permit entitles the holder to play the permitted display for the term of this permit provided all fees or pro rata fees are timely received.

**STAFF REPORT TO THE CITY OF ANTIOCH PLANNING COMMISSION
FOR CONSIDERATION AT THE MEETING OF APRIL 18, 2018**

Prepared by: Cindy Gnos, Contract Planner

Approved by: Alexis Morris, Planning Manager

Date: April 18, 2018

Subject: Meeting to Receive Comments on the Draft Environmental Impact Report for The Ranch Project

RECOMMENDATION

Staff recommends that the Planning Commission receive public comments on the Draft Environmental Report (EIR) for The Ranch Project. The meeting is not to debate or discuss the merits of the project, but to receive verbal comments that will be responded to in the Final EIR. An action from the Planning Commission is not needed at this time, but just the receiving of public comments.

BACKGROUND

The subject site is within the 2,700-acre Sand Creek Focus Area located in the southern portion of the City of Antioch. The General Plan anticipates this Focus Area to evolve into a large-scale planned community that provides a mix of housing and commercial opportunities. The project site is comprised of primarily undeveloped land, currently designated for Golf Course Community, Senior Housing, and Open Space in the General Plan.

The applicant submitted a Preliminary Planned Development (PDP) for the site which was reviewed by the Planning Commission in September and October of 2015. The original PDP included up to 1,667 residential units. Upon receiving Planning Commission feedback and additional community outreach, the applicant submitted a revised PDP application including a traditional residential community of 1,118 units or a community with an age-restricted residential component with a total of 1,307 units. The revised PDP was reviewed by the Planning Commission in November 2016.

In June 2017, the applicant submitted an application for the proposed project. A Notice of Preparation (NOP) was circulated for the project from August 11, 2017, to September 11, 2017, notifying agencies and the public that the City was preparing an EIR and requesting comments on the scope of the EIR. A public scoping meeting was held by the Planning Commission on September 6, 2017.

PROJECT DESCRIPTION

The applicant has submitted an application for development of a master planned community including multiple single-family residential neighborhoods, a village center, parks, trails and open space, various public facilities and amenities, and circulation and access improvements, as well as associated infrastructure improvements to serve the proposed planned community. The proposed project includes two scenarios: a Multi-Generational Plan (1,307 units) and a Traditional Plan (1,137 units). The Multi-Generational Plan would include a wide range of housing, including active adult housing, while the Traditional Plan would include all-ages housing, and would not include active adult housing. The project applicant is requesting approval of both scenarios to allow flexibility based upon market conditions. The requested project entitlements include approval of General Plan Amendments, Zoning Amendments, Design Guidelines, Resource Management Plan, and a Development Agreement.

DISCUSSION

The City of Antioch has prepared a Draft EIR for The Ranch Project pursuant to California Environmental Quality Act (CEQA) Guidelines in order to analyze the potential environmental effects associated with the proposed project. The Draft EIR analyzes the Traditional Plan and the Multi-Generational Plan land use scenarios as equal-level alternatives and includes a header in each section of the EIR for each land use scenario to clearly outline the difference between the plans. Underneath each header, the EIR provides a discussion of impacts unique to each land use plan and the associated mitigation measures needed to reduce the impact. The EIR includes an assessment of the individual and cumulative environmental effects associated with the implementation of each land use plan. The Introduction and the Executive Summary of the Draft EIR are provided as Attachment "A".

The Draft EIR has been prepared in accordance with the criteria, standards, and provisions of the California Environmental Quality Act of 1970 (CEQA), Section 21000 et seq. of the Public Resources Code and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.), and the regulations, requirements, and procedures of the City of Antioch. The EIR includes the following technical environmental chapters:

- Aesthetics;
- Agricultural Resources;
- Air Quality and Greenhouse Gases (including Energy);
- Biological Resources;
- Cultural Resources;
- Geology and Soils/Mineral Resources;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning/Population and Housing;

- Noise;
- Public Services, Recreation, and Utilities; and
- Transportation and Circulation.

According to CEQA Guidelines, an EIR must include a description of impacts identified as significant and unavoidable should the proposed action be implemented (CEQA Guidelines §15126.2[b]). Such impacts would be considered unavoidable when the determination is made that either mitigation is not feasible or only partial mitigation is feasible such that the impact is not reduced to a level that is less-than-significant. Based upon the analysis within the Draft EIR, there would be significant and unavoidable impacts to Aesthetics, Air Quality and Greenhouse Gases, Noise, and Transportation and Circulation. The significant and unavoidable impacts of the proposed project are as follows:

- 4.1-3 Substantially degrade the existing visual character or quality of the project site and/or the site's surroundings. Based on the analysis, even with mitigation, the impact is *significant and unavoidable*.
- 4.1-5 Long-term changes in visual character of the region associated with cumulative development of the proposed project in combination with future buildout in the City of Antioch. Based on the analysis below and the lack of feasible mitigation, the impact is *significant and unavoidable*.
- 4.3-2 Generation of long-term operational criteria air pollutant emissions and a conflict with or obstruction of implementation of regional air quality plans. Based on the analysis, even with mitigation, the impact is *significant and unavoidable* (specifically related to the generation of operational emissions of ROG and NOX and conflicts with regional air quality plans).
- 4.3-5 Generation of a cumulatively considerable contribution to criteria air pollutant emissions. Based on the analysis, even with mitigation, the impact is *significant and unavoidable* (specifically related to the generation of operational emissions of ROG and NOX).
- 4.3-6 Generation of a cumulatively considerable contribution to GHG emissions. Based on the analysis, even with mitigation, the impact is *significant and unavoidable* (specifically related to compliance with Senate Bill 32).
- 4.10-3 Operational noise from activities on-site post development. Based on the analysis, even with mitigation, the cumulative impact is *significant and unavoidable*.
- 4.12-2 Study intersections under the Existing Plus Project Condition. Based on the analysis, even with mitigation, the impact is significant and unavoidable (specifically related to the Deer Valley Road and Balfour Road intersection [Intersection 21]).

- 4.12-3 Study freeway facilities under the Existing Plus Project Condition. Based on the analysis and the lack of feasible mitigation, the impact is significant and unavoidable (specifically related to conflicts with the established MTSO for HOV lane utilization at SR 4 west of Lone Tree Way/A Street and SR 4 west of Hillcrest Avenue).
- 4.12-4 Study intersections under the Near-Term Plus Project Condition. Based on the analysis, even with mitigation, the impact is significant and unavoidable (specifically related to Intersections 6, 11, 19, and 21).
- 4.12-5 Study freeway facilities under Near-Term Plus Project Conditions. Based on the analysis and the lack of feasible mitigation, the impact is significant and unavoidable (specifically related to conflicts with the established MTSO for HOV lane utilization at SR 4 west of Lone Tree Way/A Street and SR 4 west of Hillcrest Avenue).
- 4.12-8 Study intersections under the Cumulative Plus Project Condition. Based on the analysis, even with implementation of mitigation, the cumulative impact would remain significant and unavoidable (specifically related to Intersections 4, 5, 6, 10, 11, 19, and 21).
- 4.12-9 Study freeway facilities under Cumulative Plus Project Conditions. Based on the analysis and the lack of feasible mitigation, the impact is significant and unavoidable (specifically related to conflicts with the established delay index MTSO for Eastbound SR 4 west of Lone Tree Way/A Street and conflicts with the established MTSO for HOV lane utilization at SR 4 west of Lone Tree Way/A Street and SR 4 west of Hillcrest Avenue).

Public Review

CEQA requires that the Draft EIR be distributed for a 45-day public review period, which began on March 13, 2018. The public review period originally ended on April 27, 2018. However, the City received two requests for an extension of the public comment period. Therefore, in response the City has extended the comment period by two weeks to May 14, 2018. Comments may now be submitted to the City by 5:00 pm on Monday, May 14, 2018. Though not required by CEQA, the City of Antioch is holding the April 18 public meeting on the Draft EIR in order to allow the public to provide verbal comments on the document. The meeting is not to debate or discuss the merits of the project, but to receive verbal comments that will be responded to in the Final EIR. An action from the Planning Commission is not needed at this time, but just the receiving of public comments.

ATTACHMENT

A: The Ranch DEIR Introduction and Executive Summary.

The complete Draft EIR and all technical appendices can be found on the City's website at:

<http://www.ci.antioch.ca.us/CityGov/CommDev/PlanningDivision/Environmental-docs.htm>

ATTACHMENT “A”

THE RANCH PROJECT

SCH#2017082033

DRAFT ENVIRONMENTAL IMPACT REPORT

**VOLUME I OF II
CHAPTERS 1 - 8 & APPENDICES A & B**

PREPARED FOR
THE CITY OF ANTIOCH



MARCH 2018

PREPARED BY



1501 SPORTS DRIVE, SUITE A, SACRAMENTO, CA 95834

A1

Draft Environmental Impact Report The Ranch Project

SCH # 2017082033

Lead Agency:

City of Antioch
P.O. Box 5007
Antioch, CA 94531

Prepared By:

Raney Planning and Management, Inc.
1501 Sports Drive, Suite A
Sacramento, CA 95834
(916) 372-6100

Contact:
Cindy Gnos, AICP
Senior Vice President

Rod Stinson
Division Manager/Air Quality Specialist

March 2018

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1

INTRODUCTION

1.1 INTRODUCTION

The Ranch Project (proposed project) Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act of 1970, Pub. Res. Code § 21000 et seq., as amended (CEQA) and the Guidelines for Implementation of the California Environmental Quality Act, Cal. Code Regs. Title 14, § 15000 et seq. (CEQA Guidelines). The City of Antioch is the lead agency for the environmental review of the proposed project evaluated herein and has the principal responsibility for approving the project. As required by Section 15121 of the CEQA Guidelines, this EIR will (a) inform public agency decision-makers, and the public generally, of the significant environmental effects of the project, (b) identify possible ways to minimize the significant adverse environmental effects, and (c) describe reasonable project alternatives. The public agency shall consider the information in the EIR along with other information that may be presented to the agency.

1.2 PROJECT DESCRIPTION

This section provides an overview of the project location and components. For additional project description details, please refer to Chapter 3, Project Description, of this EIR.

Project Location

The proposed project is located in the southeastern portion of the City of Antioch in eastern Contra Costa County, California. The City of Antioch is bordered to the north by the San Joaquin River Delta; to the east by the City of Brentwood and the City of Oakley; to the west by the City of Pittsburg and unincorporated portions of Contra Costa County; and to the south by unincorporated portions of Contra Costa County. The project site is located within the Sand Creek Focus Area of the General Plan, which contains lands designated by the Antioch General Plan for open space, residential, commercial, and mixed-use development. The project site is surrounded by a single-family residential subdivision to the north, undeveloped land to the south (planned for future residential), Deer Valley Road and Kaiser Permanente Antioch Medical Center to the east, and undeveloped land and Empire Mine Road (planned for future residential) to the west.

Project Components

The proposed project consists of a residential development on 551.5 acres of primarily undeveloped land, including multiple single-family residential neighborhoods, various public facilities and amenities, and circulation and access improvements, as well as associated infrastructure improvements to serve the proposed planned community. The proposed project includes two scenarios: a Multi-Generational Plan and a Traditional Plan. The Multi-

Generational Plan would include a wide range of housing, including active adult housing, while the Traditional Plan would include only all-ages housing, and would not include active adult housing. Buildout of the project would occur over the course of a number of years, as dictated by the economy and demand for new housing in the project area. For the purposes of the CEQA analysis presented in this EIR, and based on the information regarding buildout of the project provided by the project applicant, build out of the project is anticipated to occur over three phases, starting from east to west and from north to south, with the infrastructure and amenities corresponding to new unit demands. Although actual buildout of the project may occur in more than three phases, analyzing potential environmental impacts under a three-phase development scenario provides an environmental worst-case analysis, thus should the project be constructed over a longer phasing period, environmental impacts of the proposed project would likely be less than the impacts analyzed in this EIR. Phasing would be similar for both proposed development scenarios. A finalized phasing plan would be submitted to the City by the project applicant concurrent with the first tentative map application.

The project applicant is seeking discretionary approval of the following entitlements from the City of Antioch:

- *General Plan Text and Map Amendments.* The project would require the approval of General Plan text and map amendments to the Land Use Element to change the land use designations of the site from Golf Course Community/Senior Housing/Open Space, Hillside and Estate Residential, and Public/Quasi Public to Low Density Residential, Medium Low Density Residential, Mixed Use, Public/Quasi Public, and Open Space. The Multi-Generational Plan would designate a portion of the site as Senior Housing. The Circulation Element of the General Plan would be amended to reflect the proposed alignment of Sand Creek Road.
- *Rezoning.* The project would require a rezone from the current zoning, Study Area (S), to Planned Development (PD). The PD would include special development standards for the project.
- *Design Guidelines.* The design guidelines would supplement the proposed development standards.
- *Resource Management Plan.* Pursuant to section 4.4.6.7(t) of the City of Antioch General Plan, the applicant will prepare a Resource Management Plan for City approval.
- *Development Agreement.* The Development Agreement would assure the City that the proposed project would proceed to its completion in compliance with the plans submitted by the applicant, and assure the applicant of vested rights to develop the project.

1.3 PURPOSE OF THE EIR

As provided in CEQA Guidelines Section 15021, public agencies are charged with the duty to avoid or minimize environmental damage where feasible. The public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors.

CEQA requires the preparation of an EIR prior to approving any project that may have a significant effect on the environment. For the purposes of CEQA, the term *project* refers to the whole of an action that has the potential for resulting in a direct physical change or a reasonably

foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]). With respect to the proposed project, the City has determined that the proposed development is a project that has the potential for resulting in significant environmental effects within the definition of CEQA.

The EIR is an informational document that appraises decision makers and the general public of the potential significant environmental effects of a proposed project. An EIR must describe a reasonable range of potentially feasible alternatives to the project and identify feasible measures to minimize any significant effects. The lead agency, which is the City of Antioch for this project, is required to consider the information in the EIR in deciding whether to approve or deny the application. The basic requirements for an EIR include discussions of the environmental setting, environmental impacts, mitigation measures, alternatives, growth inducing impacts, and cumulative impacts.

1.4 EIR PROCESS

The EIR process begins with the decision by the lead agency to prepare an EIR, either during a preliminary review of a project or at the conclusion of an Initial Study. Once the decision is made to prepare an EIR, the lead agency sends a Notice of Preparation (NOP) to appropriate government agencies and, when required, to the State Clearinghouse (SCH) in the Office of Planning and Research (OPR), which will ensure that responsible and trustee State agencies reply within the required time. The SCH assigns an identification number to the project, which then becomes the identification number for all subsequent environmental documents on the project. Commenting agencies have 30 days to respond to the NOP and provide information regarding alternatives and mitigation measures they wish to have explored in the EIR and to provide notification regarding whether the agency will be a responsible agency or a trustee agency for the project. An NOP (see Appendix A) was prepared for the proposed project and was circulated from August 11, 2017 to September 11, 2017. A public scoping meeting was held on September 6, 2017 for the purpose of informing the public and receiving comments on the scope of the environmental analysis to be prepared for the proposed project. See Section 1.6 below for a summary of comments received on the NOP.

As soon as the Draft EIR is completed, a notice of completion will be filed with the SCH and a public notice of availability will be published to inform interested parties that a Draft EIR is available for agency and public review. In addition, the notice provides information regarding the location of copies of the Draft EIR available for public review and any public meetings or hearings that are scheduled. The Draft EIR will be circulated for a period of 45 days, during which time reviewers may make comments. The lead agency must respond to comments in writing, describing the disposition of any significant environmental issues raised and explaining in detail the reasons for not accepting any specific comments concerning major environmental issues. If significant new information, as defined in CEQA Guidelines Section 15088.5, is added to an EIR after public notice of availability is given but before certification of the EIR, the revised EIR or affected chapters must be recirculated for an additional public review period with related comments and responses.

A Final EIR will be prepared, containing the Draft EIR or a revision thereof as well as comments and responses to comments on the Draft EIR. Before approving a project, the lead agency shall certify that the Final EIR has been completed in compliance with CEQA, and that the Final EIR has been presented to the decision-making body of the lead agency, which has reviewed and considered the EIR. The lead agency shall also certify that the Final EIR reflects the lead agency's independent judgment and analysis.

The findings prepared by the lead agency must be based on substantial evidence in the administrative record. If the decision-making body elects to proceed with a project that would have unavoidable significant impacts, then a Statement of Overriding Considerations explaining the decision to balance the benefits of the project against unavoidable environmental impacts must be prepared.

1.5 SCOPE OF THE EIR

This EIR constitutes a project-level analysis, and pursuant to CEQA Guidelines Section 15161, covers "all phases of the project including planning, construction, and operation." State CEQA Guidelines Section 15126.2(a) states, in pertinent part:

An EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced.

Pursuant to these guidelines, the scope of this EIR addresses specific issues and concerns identified as potentially significant in the NOP prepared for the proposed project (see Appendix A). The City determined that the following issues will be addressed in the EIR:

- Aesthetics;
- Agricultural Resources;
- Air Quality and Greenhouse Gas Emissions;
- Biological Resources;
- Cultural Resources;
- Geology, Soils, and Mineral Resources;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning/Population and Housing;
- Noise;
- Public Services, Recreation, and Utilities; and
- Transportation and Circulation.

The evaluation of effects is presented on a resource-by-resource basis in Chapters 4.1 through 4.12 of the EIR. Each technical chapter is divided into four sections: Introduction, Existing Environmental Setting, Regulatory Context, and Impacts and Mitigation Measures.

Impacts that are determined to be significant in Chapter 4, and for which feasible mitigation measures are not available to reduce those impacts to a less-than-significant level, are identified as *significant and unavoidable*. Chapter 5 of the EIR presents a discussion of growth-inducing impacts, summary of cumulative impacts, energy conservation, and significant irreversible environmental changes associated with the project. Alternatives to the proposed project are discussed in Chapter 6 of the EIR.

1.6 COMMENTS RECEIVED ON THE NOP

The City of Antioch received 51 written comments and verbal comments during the open comment period for the NOP for the proposed project (see Appendix B).

The following list, categorized by issue, summarizes the concerns:

<u>Aesthetics</u> (c.f. Chapter 4.1)	Concerns related to: <ul style="list-style-type: none"> • Aesthetic impacts on loss of the hillsides and open space.
<u>Air Quality and GHG Emissions</u> (c.f. Chapter 4.3)	Concerns related to: <ul style="list-style-type: none"> • Impacts of GHG emissions during construction and long-term operational emissions, as well as in the context on AB 32 and SB 375 and ability to meet the State's reduction targets. • Increased GHG emissions as a result of increased vehicle miles traveled (VMT). • Cumulative impacts on regional criteria air pollutants and GHG emissions in relation to regional climate change goals and BAAQMD thresholds and adding significant residential development at the edge of the City's current build-out footprint.
<u>Biological Resources</u> (c.f. Chapter 4.4)	Concerns related to: <ul style="list-style-type: none"> • The presence of listed rare, threatened, endangered, locally unique, and special-status species, including the Mount Diablo Buckwheat. • Potential impacts to wildlife habitat along Sand Creek and other wildlife corridors.
<u>Geology, Soils, and Mineral Resources</u> (c.f. Chapter 4.6)	Concerns related to: <ul style="list-style-type: none"> • Development at higher elevations within the project site. • Risks of soil erosion near the ravine bed/streams. • Risks of collapse of historical mine shafts within the project site.

<u>Hazards and Hazardous Materials</u> (c.f. Chapter 4.7)	Concerns related to: <ul style="list-style-type: none"> Increased risks of wildland fires.
<u>Hydrology and Water Quality</u> (c.f. Chapter 4.8)	Concerns related to: <ul style="list-style-type: none"> Potential impacts to streams, creek banks, or wetlands, including Sand Creek. Proposed drainage sites and detention basins and ability to prevent pollutants from contaminating Sand Creek and other nearby waterways. Development on floodplains and the effects on the local watershed. Potential impacts to groundwater and creek water resources.
<u>Land Use and Planning/Population and Housing</u> (c.f. Chapter 4.9)	Concerns related to: <ul style="list-style-type: none"> Ratio of dwelling units per acre. Mass grading of the hillsides. Open space surrounding the City. Current excess vacant housing. Potential impacts to the jobs-housing balance in the region. Change in land uses and associated General Plan changes that could affect traffic and residential uses including the removal of the golf course to add more residential development.
<u>Noise</u> (c.f. Chapter 4.10)	Concerns related to: <ul style="list-style-type: none"> Potential noise impacts to neighboring residential communities.
<u>Public Services, Recreation, and Utilities</u> (c.f. Chapter 4.11)	Concerns related to: <ul style="list-style-type: none"> Cumulative impacts related to solid waste, stormwater, and other utility services. Cumulative impacts related to fire protection, police protection services, and emergency response services, including costs associated with provision of services. Overcrowding of the school district. Long-term funding mechanisms to maintain and operate the staging areas for parks and trails. Safety and connectivity of all proposed trails within the park staging area, as well as consideration of impacts on resources. Safety for bicyclists and pedestrians along and crossing Deer Valley Road. Cumulative impacts on water supply in East Contra Costa County. Consideration of State and regional drought conditions.
<u>Transportation and Circulation</u> (c.f. Chapter 4.12)	Concerns related to: <ul style="list-style-type: none"> Cumulative transportation and circulation impacts, including public transportation and extension of regional roadways.

	<ul style="list-style-type: none"> • Sufficient signalization on roadways between the project site and the SR 4 Bypass. • Unsafe regional road and traffic conditions, especially during school hours. • Cumulative impacts on SR 4 and regional roadways. • Improvement of regional accessibility through the use of alternative modes of transportation beyond automobiles. • Analysis of VMT resulting from the proposed project. • Provision of a schematic illustration of walking, biking, and auto conditions at the project site and study area roadways. • Potential impacts on pedestrians, bicycles, disabled travelers, and transit performance, including counter measures and trade-offs resulting from mitigating VMT increases. • Project-generated travel demand and estimated costs of public transportation improvements, including viable funding sources.
<u>Alternatives</u> (c.f. Chapter 6)	<p>Concerns related to:</p> <ul style="list-style-type: none"> • Project alternatives that include increased preservation of Open Space and hillsides.

All of these issues are addressed in this EIR, in the relevant chapters identified in the first column.

1.7 ORGANIZATION OF THE EIR

The EIR for the proposed project is organized into the following chapters:

Chapter 1 – Introduction

Provides an introduction and overview describing the intended use of the EIR and the review and certification process, as well as summaries of the chapters included in the EIR and summaries of the issues and concerns received from the public and public agencies during the NOP review period.

Chapter 2 – Executive Summary

Summarizes the elements of the project and the environmental impacts that would result from implementation of the proposed project, describes proposed mitigation measures, and indicates the level of significance of impacts after mitigation. Acknowledges alternatives that could reduce or avoid significant impacts.

Chapter 3 – Project Description

Provides a detailed description of the proposed project, including the project's location, background information, major objectives, and technical characteristics.

Chapter 4 – Existing Environmental Setting, Impacts, and Mitigation

Contains a project-level and cumulative analysis of environmental issue areas associated with the proposed project. Each environmental issue chapter contains an introduction and description of

the project setting, identifies impacts, and recommends appropriate mitigation measures, if needed.

Chapter 5 – Statutorily Required Sections

Provides discussions required by CEQA regarding impacts that would result from the proposed project, including a summary of cumulative impacts, potential growth-inducing impacts, impacts related to energy conservation, significant and unavoidable impacts, and significant irreversible changes to the environment.

Chapter 6 – Alternatives Analysis

Describes the alternatives to the proposed project, their respective environmental effects, and a determination of the environmentally superior alternative.

Chapter 7 – References

Provides bibliographic information for all references and resources cited.

Chapter 8 – EIR Authors and Persons Consulted

Lists EIR and technical report authors who provided technical assistance in the preparation and review of the Draft EIR.

Appendices

Includes the NOP, comments received during the NOP comment period, and all technical reports prepared for the proposed project.

2

EXECUTIVE SUMMARY

2.1 INTRODUCTION

The Executive Summary chapter of the EIR provides an overview of the proposed project and summarizes the conclusions of the environmental analysis provided in Chapters 4.1 through 4.12. The chapter also reviews the alternatives to the proposed project that are described in the Alternatives Analysis chapter and identifies the Environmentally Superior Alternative. Table 2-3, found at the end of this chapter, provides a summary of the environmental effects of the proposed project, as identified in each technical chapter of the EIR. Table 2-3 also contains the potential environmental impacts associated with the proposed project, the significance of the impacts, the proposed mitigation measures for the impacts, and the significance of the impacts after implementation of the mitigation measures.

2.2 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

The proposed project site is located in the southeastern portion of the City of Antioch in eastern Contra Costa County, California. Specifically, the project site is situated within the Sand Creek Focus Area of the General Plan, which contains lands designated by the Antioch General Plan for open space, residential, commercial, and mixed-use development. The project site consists of 551.5 acres of primarily undeveloped land, designated Golf Course Community/Senior Housing/Open Space, Hillside and Estate Residential, and Public/Quasi Public in the City of Antioch General Plan and zoned Study Area (S).

Currently, the project site has a cattle-grazing operation, a single-family residence, and various barns and outbuildings located on the eastern portion of the site. Historical uses of the site include grazing and limited natural gas exploration. Sand Creek, a tributary of Marsh Creek, flows west to east through the proposed project site. The topography of the site is varied, ranging from relatively level areas in the eastern and central portions of the site, gently-sloping hills immediately north and south of Sand Creek, and moderate to steep slopes in the western portion of the site. A large stockpile of soil and large boulders is situated on the northern portion of the proposed project site, near the terminus of Dallas Ranch Road. The stockpiles are likely the result of construction activities associated with Dallas Ranch Road and the existing single-family residential subdivision located to the north of the site.

Surrounding land uses include a single-family, medium density residential subdivision to the north, undeveloped land to the south (planned for future residential), Deer Valley Road and Kaiser Permanente Antioch Medical Center to the east, and Empire Mine Road and undeveloped land (planned for future residential) to the west.

For the purposes of this EIR, the proposed project includes two scenarios: a Multi-Generational Plan and a Traditional Plan. The Multi-Generational Plan (1,307 units) would include a wide

range of housing, including active adult housing, while the Traditional Plan (1,137 units) would include only all-ages housing, and would not include active adult housing. The project applicant is requesting approval of both scenarios to allow flexibility based upon market conditions. The two proposed scenarios would provide a mix of different single-family residential neighborhood types organized into two distinct development areas to the north and south of the Sand Creek corridor. In addition, various public facilities and amenities, circulation and access improvements, and infrastructure improvements to serve the proposed planned community would be included. Development standards for each of the proposed land uses would be included as part of the proposed project as well. Proposed land uses, densities, and lot sizes of both development scenarios are shown in Table 2-1 and Table 2-2.

Buildout of the project would occur over the course of a number of years, as dictated by the economy and demand for new housing in the project area. The project would be constructed in three phases, with the infrastructure and amenities corresponding to new unit demands. The project site would be built out starting from east to west and from north to south. Phasing would be similar for both proposed development scenarios. A finalized phasing plan would be submitted to the City by the project applicant concurrent with the first tentative map application.

The project applicant is seeking discretionary approval of the following entitlements from the City of Antioch:

- *General Plan Text and Map Amendments.* The project would require the approval of General Plan text and map amendments to the Land Use Element to change the land use designations of the site from Golf Course Community/Senior Housing/Open Space, Hillside and Estate Residential, and Public/Quasi Public to Low Density Residential, Medium Low Density Residential, Mixed Use, Public/Quasi Public, and Open Space. The Multi-Generational Plan would designate a portion of the site as Senior Housing. The Circulation Element of the General Plan would be amended to reflect the proposed alignment of Sand Creek Road.
- *Rezoning.* The project would require a rezone from the current zoning, Study Area (S), to Planned Development (PD). The PD would include special development standards for the project.
- *Design Guidelines.* The design guidelines would supplement the proposed development standards.
- *Resource Management Plan.* Pursuant to section 4.4.6.7(t) of the City of Antioch General Plan, the applicant will prepare a Resource Management Plan for City approval.
- *Development Agreement.* The Development Agreement would assure the City that the proposed project would proceed to its completion in compliance with the plans submitted by the applicant, and assure the applicant of vested rights to develop the project.

The proposed project would require the following additional City of Antioch entitlements prior to development in the future:

- Large Lot Tentative Subdivision Map(s);
- Small Lot Tentative Subdivision Map(s);

- Design Review; and
- Conditional Use Permit(s).

Table 2-1 Multi-Generational Plan Land Use					
Land Use		Acreage	Net Density (du/ac)	Average Lot Size (sf)	Target Number of Units
Low Density (LD)	LD-1	35	3.4	10,000	120
	LD-2	18	3.6	7,000	65
	LD-3	104	3.9	7,000	410
Active Adult (AA)		93	5.4	5,000	500
Medium Density (MD)		38	5.6	4,500	212
TOTAL RESIDENTIAL		288	4.5		1,307
Village Center (VC)		5			
Public Use (PQ)	Fire Station (PQ-F)	2			
	Staging Area (PQ-S)	1.5			
Parks (P)		22			
Landscape (L)		2.5			
Open Space (OS)		194.5			
Major Roadways		36			
GRAND TOTAL		551.5			

Table 2-2 Traditional Plan Land Use					
Land Use		Acreage	Net Density (du/ac)	Average Lot Size (sf)	Target Number of Units
Low Density (LD)	LD-1	45	3.4	10,000	155
	LD-2	100	3.6	7,000	360
	LD-3	104	3.9	7,000	410
Medium Density (MD)		38	5.6	4,500	212
TOTAL RESIDENTIAL		287	4.0		1,137
Village Center (VC)		5			
Public Use (PQ)	Fire Station (PQ-F)	2			
	Staging Area (PQ-S)	1.5			
Parks (P)		17.5			
Landscape (L)		3			
Open Space (OS)		199.5			
Major Roadways		36			
GRAND TOTAL		551.5			

2.3 MITIGATION MONITORING AND REPORTING PROGRAM

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 environmental findings related to environmental

impact reports (see Guidelines Section 15091 for Findings). In order to ensure that the mitigation measures and project revisions identified in the EIR are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.

Consistent with CEQA Section 15097, implementation of the proposed project would require adoption of a Mitigation Monitoring and Reporting Program (MMRP) by the City of Antioch. The MMRP specifies the methods for monitoring mitigation measures required to eliminate or reduce the project's significant effects on the environment.

2.4 ENVIRONMENTAL IMPACTS AND REQUIRED MITIGATION MEASURES

Under the California Environmental Quality Act (CEQA), a significant effect on the environment is defined as a substantial, or potentially substantial, adverse change in any of the existing physical conditions within the area affected by the project, including land, air, water, mineral, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Mitigation measures must be implemented as part of the proposed project to reduce potential adverse impacts to a less-than-significant level. Such mitigation measures are noted in this EIR and are found in the following chapters of this EIR: Aesthetics; Air Quality and Greenhouse Gas (GHG) Emissions; Biological Resources; Cultural Resources; Geology, Soils, and Mineral Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Noise; and Transportation and Circulation. The mitigation measures presented in the EIR will form the basis of the Mitigation Monitoring and Reporting Program. Any impact that remains significant after implementation of mitigation measures is considered a significant and unavoidable impact.

A summary of the identified impacts in the technical sections of the EIR is presented in Table 2-3. In Table 2-3, the proposed project impacts are identified for each technical chapter (Chapter 4.1 through 4.12) of the EIR. In addition, Table 2-3 includes the level of significance of each impact, any mitigation measures required for each impact, and the resulting level of significance after implementation of mitigation measures for each impact.

2.5 SUMMARY OF PROJECT ALTERNATIVES

The following section presents a summary of the evaluation of the alternatives considered for the proposed project, which include the:

- No Project (No Build) Alternative;
- No Project (Existing General Plan) Alternative;
- Reduced Footprint Alternative; and
- Reduced Intensity/Senior Housing Alternative.

No Project (No Build) Alternative

CEQA requires the evaluation of the comparative impacts of the “No Project Alternative” (CEQA Guidelines Section 15126.6(e)). The No Project Alternative may be defined either as the “no action taken on the proposed project” or a “no build” on the project site. The No Project (No Build) Alternative is defined as the continuation of the existing conditions of the project site, which is 551.5 acres of primarily undeveloped land. Currently, the project site has a cattle-grazing operation, a single-family residence, and various barns and outbuildings located on the eastern portion of the site. The No Project (No Build) Alternative would not meet any of the project objectives. Because development of the site would not occur, land disturbance and any associated physical environmental impacts would not occur as a result of the No Project (No Build) Alternative. The Alternatives Analysis chapter of the EIR identified that the No Project (No Build) Alternative could result in greater impacts than the proposed project related to Land Use and Planning/Population and Housing. However, impacts would not occur under the No Project (No Build) Alternative in all other resource areas.

No Project (Existing General Plan) Alternative

In addition to the No Project (No Build) Alternative described above, the City has decided to evaluate a No Project (Existing General Plan) Alternative as well. Per the City of Antioch General Plan, the proposed project site is designated Golf Course Community/Senior Housing/Open Space, Hillside and Estate Residential, and Public/Quasi Public. The City currently assumes that the golf course would occupy approximately 212 acres on the project site, but the location of the golf course, whether on hillsides, flat areas, etc., is speculative. The same acreage as the proposed project for Public/Quasi Public uses of 3.5 acres is assumed for the No Project (Existing General Plan) Alternative. In addition, the same acreage of 36 acres for major roadways is assumed for the No Project (Existing General Plan) Alternative. A total of approximately 1,020 dwelling units is assumed for the No Project (Existing General Plan) Alternative, which would include senior housing opportunities.

The No Project (Existing General Plan) Alternative would be capable of achieving the majority of the proposed project’s objectives. The No Project (Existing General Plan) Alternative would result in fewer impacts than the proposed project in eight resource areas (Aesthetics, Air Quality and GHG Emissions, Geology, Soils, and Mineral Resources, Hazards and Hazardous Materials, Land Use and Planning/Population and Housing, Noise, Public Services, Recreation, and Utilities, and Transportation and Circulation), and similar impacts in four resource areas (Agricultural Resources, Biological Resources, Cultural Resources, and Hydrology and Water Quality). The No Project (Existing General Plan) Alternative would not result in greater impacts than the proposed project in any resource area. It should be noted that the significant and unavoidable impacts identified for the proposed project would remain with implementation of the No Project (Existing General Plan) Alternative.

Reduced Footprint Alternative

The Reduced Footprint Alternative would involve buildout similar to that of the proposed project, with the exception of the overall substantially reduced development footprint. The

Reduced Footprint Alternative would still involve a mix of densities similar to the development scenarios of the proposed project; however, the Reduced Footprint Alternative would not include development within the southern portion of the site, south of Sand Creek Road, where moderate to steep slopes are present. All portions of the site south of Sand Creek, a tributary of Marsh Creek, would be preserved in perpetuity through a conservation easement, or other similar legal mechanism, as open space under the Reduced Footprint Alternative. Accordingly, the Reduced Footprint Alternative would not include the bridges over Sand Creek that are anticipated as part of the proposed project. An amendment to the Circulation Element of the General Plan would be required for the Alternative, similar to the proposed project.

The Reduced Footprint Alternative would involve a total of 1,300 single-family, detached and attached, dwelling units, which could include senior housing opportunities. The units would be composed of 82 acres (820 units) of Medium Density (10 dwelling units per acre) and 80 acres (480 units) of Medium Low Density (six dwelling units per acre) residential units. Accordingly, the Reduced Footprint Alternative would require a General Plan Amendment to the Land Use Map and text modifications to the Sand Creek Focus Area of the General Plan to create a Medium Low Density and a Medium Density designation in the Sand Creek Focus Area that is consistent with the General Plan designations.

The Reduced Footprint Alternative would continue Dallas Ranch Road as Sand Creek Road through Deer Valley Road, with ultimate buildout of two lanes each way, along with a landscaped median. A trail system along the northern side of Sand Creek would be included in the Reduced Footprint Alternative, which would provide interconnectivity through neighborhoods.

The Reduced Footprint Alternative would still be capable of achieving many of the proposed project's objectives. The Reduced Footprint Alternative would result in fewer impacts than the proposed project in five resource areas (Aesthetics, Biological Resources, Cultural Resources, Geology, Soils, and Mineral Resources, and Hydrology and Water Quality), and similar impacts in four resource areas (Agricultural Resources, Hazards and Hazardous Materials, Land Use and Planning/Population and Housing, and Public Services, Recreation, and Utilities). However, the Reduced Footprint Alternative would result in greater impacts than the proposed project in three resource areas (Air Quality and GHG Emissions, Noise, and Transportation and Circulation). All of the significant and unavoidable impacts identified for the proposed project would still occur with implementation of the Reduced Footprint Alternative.

Reduced Intensity/Senior Housing Alternative

The Reduced Intensity/Senior Housing Alternative would involve buildout similar to that of the proposed project, with the exception of the residential units. Rather than the mix of densities proposed for both of the development scenarios of the proposed project, the Reduced Intensity/Senior Housing Alternative would be built out with only age-restricted senior housing at the maximum allowable density envisioned for the Sand Creek Focus Area. The Reduced Intensity/Senior Housing Alternative would not include development within the southwestern portion of the site, south of Street C, where moderate to steep slopes are present. That area would be preserved as open space under the Reduced Intensity/Senior Housing Alternative.

Accordingly, the Reduced Intensity/Senior Housing Alternative would involve a total of 968 age-restricted, single-family, detached dwelling units. Although the Reduced Intensity/Senior Housing Alternative would be developed in accordance with maximum densities envisioned for the Sand Creek Focus Area, the Reduced Intensity/Senior Housing Alternative would not include the golf course use anticipated for the Sand Creek Focus Area.

The Reduced Intensity/Senior Housing Alternative would still be capable of achieving the majority of the proposed project's objectives. The Reduced Intensity/Senior Housing Alternative would result in fewer impacts than the proposed project in 11 resource areas (Aesthetics, Air Quality and GHG Emissions, Biological Resources, Cultural Resources, Geology, Soils, and Mineral Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning/Population and Housing, Noise, Public Services, Recreation, and Utilities, and Transportation and Circulation), and similar impacts in one resource areas (Agricultural Resources). Two of the significant and unavoidable impacts identified for the proposed project related to air quality and GHG emissions would be reduced to less-than-significant levels with implementation of the Reduced Intensity/Senior Housing Alternative. The Reduced Intensity/Senior Housing Alternative would not result in greater impacts than the proposed project in any resource area.

Environmentally Superior Alternative

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states, "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." Generally, the environmentally superior alternative is the one that would result in the fewest environmental impacts as a result of project implementation.

As presented in the Alternatives Analysis chapter of the EIR, all of the significant impacts identified for the proposed project would not occur or would be fewer under the No Project (No Build) Alternative. In addition, the No Project (Existing General Plan) Alternative would reduce a number of significant impacts identified for the proposed project, and would reduce a significant and unavoidable impact identified for the proposed project related to noise. However, given that a "no project" alternative shall not be selected as the environmentally superior alternative, neither the No Project (No Build) Alternative nor the No Project (Existing General Plan) Alternative may be chosen as the environmentally superior alternative.

The Reduced Intensity/Senior Housing Alternative would reduce the most impacts in comparison to the proposed project. In addition, the Reduced Intensity/Senior Housing Alternative would reduce two of the significant and unavoidable impacts identified for the proposed project to less-than-significant levels, both related to air quality and GHG emissions. Because a "no project" alternative shall not be selected as the environmentally superior alternative, and because Reduced Intensity/Senior Housing Alternative would result in the fewest impacts in the most resource areas than the proposed project in comparison to all other development alternatives, the

Reduced Intensity/Senior Housing Alternative would be considered the Environmentally Superior Alternative.

**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.1 Aesthetics			
4.1-1 Substantial adverse effect on a scenic vista.	LS	<i>None required.</i>	N/A
4.1-2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway.	NI	<i>None required.</i>	N/A
4.1-3 Substantially degrade the existing visual character or quality of the project site and/or the site's surroundings.	S	<i>None feasible.</i>	SU
4.1-4 Creation of new sources of substantial light or glare that would adversely affect day or nighttime views in the area.	S	<p><i>Multi-Generational and Traditional Plans</i></p> <p>4.1-4 Prior to approval of Improvement Plans that include street lights, the City of Antioch's Engineering Division shall review and approve the lighting specifications to ensure that street lighting fixtures comply with the Zoning Code's requirements for minimum and maximum ground-level illumination. In addition, prior to approval of building permits for new structures that include exterior lighting, the City of Antioch's Planning Division shall review and approve the exterior lighting specifications to ensure exterior lighting is of a low</p>	LS

NI = No Impact; N/A = Not Applicable; LS = Less-than-Significant; S = Significant; SU = Significant and Unavoidable

**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.1-5 Long-term changes in visual character of the region associated with cumulative development of the proposed project in combination with future buildout in the City of Antioch.	S	<i>None feasible. profile and intensity.</i>	SU
4.1 Agricultural Resources			
4.2-1 Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance ("Farmland"), or involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.	LS	<i>None required.</i>	N/A
4.2-2 Conflict with existing agricultural zoning or a Williamson Act contract, or conflict with existing forest land or timberland zoning, or	NI	<i>None required.</i>	N/A

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
result in the loss of forest land or conversion of forest land to non-forest use.			
4.2-3 Cumulative changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.	LS	<i>None required.</i>	N/A
4.3 Air Quality and Greenhouse Gas Emissions			
4.3-1 Generation of short-term construction-related criteria air pollutant emissions.	LS	<i>None required.</i>	N/A
4.3-2 Generation of long-term operational criteria air pollutant emissions and a conflict with or obstruction of implementation of regional air quality plans.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p>4.3-2 <i>In order to reduce criteria air pollutant emissions from the proposed project, all future Improvement Plans for the proposed project, including plans for either residential or commercial developments within the project site, shall show the following features:</i></p> <ul style="list-style-type: none"> • <i>Build out of the project site shall include the provision of bus stops per consultation with</i> 	SU

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>Tri Delta Transit;</i></p> <ul style="list-style-type: none"> • <i>All indoor faucets installed within the project site shall include low flow fixtures, per the CalGreen Tier 1 Standards; and</i> • <i>All outdoor landscaping shall include water conserving measures, per the CalGreen Tier 1 Standards, as such standards relate to water use reductions in landscaping.</i> <p><i>In addition, Improvement Plans for the proposed project shall identify all feasible mitigation measures developed in coordination with the BAAQMD and the City to reduce significant impacts to the extent feasible. Mitigation Measures may include, but would not be limited to, BAAQMD's recommended mitigation measures such as the following:</i></p> <ul style="list-style-type: none"> • <i>Use zero-VOC paints, finishes, and adhesives only;</i> • <i>Orient buildings to maximize passive solar heating;</i> • <i>Improve bike and pedestrian network (complete sidewalks, connection to adjacent</i> 	

NI = No Impact; N/A = Not Applicable; LS = Less-than-Significant; S = Significant; SU = Significant and Unavoidable

**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>areas, connection to bike network, etc.);</p> <ul style="list-style-type: none"> • Implement bicycle and pedestrian facilities such as bike lanes, routes, and paths, bike parking, sidewalks, and benches; • Promote ridesharing, transit, bicycling, and walking for work trips; • Extend transit service into project site; • Participate in bike sharing programs; • Implement programs that offer residents free or discounted transit passes to encourage transit use; • Subsidize residential transit passes; • Promote use of public electric vehicle charging infrastructure; • Provide charging stations and preferential parking spots for electric vehicles; • Provide traffic calming features; • Minimize use of cul-de-sacs and incomplete roadway segments; • Install energy star appliances; • Install solar water heating; • Provide community composting facilities or curb-side food waste services; 	

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<ul style="list-style-type: none"> • Use water efficient landscapes and native/drought-tolerant vegetation; and • Provide electrical outlets outside of homes to allow for use of electrically powered landscaping equipment. <p>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. 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.</p>	

NI = No Impact; N/A = Not Applicable; LS = Less-than-Significant; S = Significant; SU = Significant and Unavoidable

**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.3-3 Exposure of sensitive receptors or the general public to substantial levels of pollutant concentrations.	LS	<i>None required.</i>	N/A
4.3-4 Creation of objectionable odors affecting a substantial number of people.	LS	<i>None required.</i>	N/A
4.3-5 Generation of a cumulatively considerable contribution to criteria air pollutant emissions.	S	<i>Multi-Generational Plan and Traditional Plan</i>	SU
4.3-6 Generation of a cumulatively considerable contribution to GHG emissions.	S	<p><i>4.3-5 Implement Mitigation Measure 4.3-2.</i></p> <p><i>Multi-Generational Plan and Traditional Plan</i></p> <p><i>4.3-6 In addition to the mitigation measures discussed in Mitigation Measure 4.3-2, the proposed project shall be required to implement further measures to reduce GHG emissions to the maximum extent feasible. Such further measures may include, but are not limited to, the following:</i></p> <ul style="list-style-type: none"> <i>Use cool roof materials;</i> <i>Plant shade trees;</i> <i>Install smart meters and programmable thermostats;</i> <i>Install charging stations and preferential</i> 	SU

NI = No Impact; N/A = Not Applicable; LS = Less-than-Significant; S = Significant; SU = Significant and Unavoidable

**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>parking spots for electric vehicles;</i></p> <ul style="list-style-type: none"> <i>Install energy star appliances;</i> <i>Install solar water heating;</i> <i>Exceed minimum CALGreen standards (e.g., adopt Tier 1 or Tier 2 voluntary measures); and/or</i> <i>Pre-wire homes for photovoltaic systems.</i> <p><i>It should be noted that many of the mitigation measures indicated in Mitigation Measure 4.3-2 would act to reduce GHG emissions as well as emissions related to criteria pollutants.</i></p>	
4.4 Biological Resources			
4.4-1 Have a substantial adverse effect, either directly or through habitat modifications, on special-status plant species.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p>4.4-1(a) Prior to approval of grading permits for each phase, a qualified biologist shall conduct protocol-level floristic surveys for Carquinez goldenbush (<i>Isocoma arguta</i>) within the appropriate bloom period for the project site. If Carquinez goldenbush is found during the surveys within the project site, a qualified biologist shall establish avoidance zones around the plant species. The avoidance zones around the plant populations shall clearly demarcate areas for avoidance. If the plant</p>	LS

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>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 Planning Division. All survey results shall be submitted to the City of Antioch Planning Division prior to approval of grading permits.</p>	
		<p>4.4-1(b) Prior to the initiation of any construction activities for each phase, a qualified biologist shall establish avoidance zones around the special-status plant species identified within the project site (shining navarretia, crownscale, and San Joaquin spearscale). The avoidance zones around the plant populations shall clearly demarcate areas for avoidance. 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 Planning Division.</p>	
		<p>4.4-1(c) Prior to approval of grading permits for each phase, a qualified biologist shall conduct focused special-status plant surveys for the off-site improvement areas.</p>	

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>Focused surveys shall be performed according to CNPS protocols. Surveys shall be timed according to the blooming period for target species and known reference populations, if available, and/or local herbaria should be visited prior to surveys to confirm the appropriate phenological state of the target species. If special-status plants are not found within the off-site improvement areas, measures pertaining to special-status plants in the off-site improvement areas are not necessary. All survey results shall be submitted to the City of Antioch Planning Division prior to approval of grading permits.</i></p> <p><i>If special-status plant species are found during the focused special-status plant surveys in the off-site improvement areas, a qualified biologist shall establish avoidance zones around the plant species. The avoidance zones around the plant populations shall clearly demarcate areas for avoidance. Avoidance measures and buffer distances may vary between species and the specific avoidance zone distance shall be determined in coordination with the City of Antioch Planning Division.</i></p> <p><i>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</i></p>	

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>City of Antioch to reduce impacts to the identified special-status plant populations, subject to review and approval by the City of Antioch Planning Division.</i></p> <p><i>Alternatively, 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> 	
4.4-2 Have a substantial adverse effect, either directly or through habitat modifications, on valley elderberry longhorn beetle.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p>4.4-2 <i>Prior to the initiation of any construction activities for each phase, a qualified biologist shall establish a minimum 100-foot no-disturbance buffer around the elderberry shrub identified within the project site. The on-site no-disturbance buffer shall be maintained</i></p>	LS

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.4-3 Have a substantial adverse effect, either directly or through habitat modifications, on vernal pool fairy shrimp and the vernal pool tadpole shrimp.	S	<p><i>throughout all construction activities. High-visibility Environmental Sensitive Area fencing and signage shall be placed at least 100 feet from the dripline of each elderberry shrub. If the elderberry shrub cannot be avoided by 100 feet, consultation with USFWS is required.</i></p> <p><i>Multi-Generational Plan and Traditional Plan</i></p> <p><i>4.4-3(a) Prior to any approval of grading permits, the project applicant shall consult with the USFWS regarding impacts to vernal pool fairy shrimp and vernal pool tadpole shrimp from the proposed project. The project sponsor shall obtain the appropriate take authorization (Section 7 Biological Opinion) from the USFWS prior to approval of grading permits. The project applicant shall comply with all terms of the endangered species permits including any mitigation requirements and provide proof of compliance to the City of Antioch Planning Division prior to issuance of a grading permit.</i></p> <p><i>Alternatively, the project applicant could comply with one of the following conditions:</i></p> <p><i>1. Comply with the applicable terms and conditions of the East Contra Costa County Habitat Conservation Plan/Natural Community</i></p>	LS

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>Conservation Plan (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</p> <p>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.</p>	
		<p>4.4-3(b) Subject to review and approval by the City of Antioch Building Division, project grading shall only occur during the dry season (April 15 – October 30) and only after a qualified biologist has determined that all wetland areas of the site providing potential habitat for vernal pool crustaceans are dry, and individuals of these species, if present, would be in cyst form.</p>	
		<p>Multi-Generational Plan and Traditional Plan</p>	LS
4.4-4 Have a substantial adverse effect, either directly or through habitat modifications, on California red-legged frog.	S	<p>4.4-4 Prior to approval of grading permits, the project applicant shall consult with the USFWS and CDFW regarding impacts to California red-legged frog from the proposed project. The project sponsor shall obtain</p>	

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>the appropriate take authorization from the USFWS (Section 7 or 10 of the FESA) and/or from the CDFW (Section 2081 of the California Fish and Game Code). The project applicant shall comply with all required compensatory mitigation determined during consultation with the USFWS and CDFW, and provide proof of compliance to the City of Antioch Planning Division.</i></p> <p><i>Alternatively, 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/NCCCP, 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/NCCCP 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> 	

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.4-5 Have a substantial adverse effect, either directly or through habitat modifications, on California tiger salamander.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p><i>4.4-5 Prior to approval of grading permits, the project applicant shall consult with the USFWS and CDFW regarding impacts to California tiger salamander from the proposed project. The project sponsor shall obtain the appropriate take authorization from the USFWS (Section 7 or 10 of the FESA) and/or from the CDFW (Section 2081 of the California Fish and Game Code). The project applicant shall comply with all required compensatory mitigation determined during consultation with the USFWS and CDFW, and provide proof of compliance to the City of Antioch Planning Division.</i></p> <p><i>Alternatively, 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</i> 	LS

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.4-6 Have a substantial adverse effect, either directly or through habitat modifications, on foothill yellow-legged frog.	S	<p><i>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>Multi-Generational Plan and Traditional Plan</i></p> <p>4.4-6 Within 48 hours prior to the initiation of any construction activities for each phase, a qualified biologist shall conduct a preconstruction foothill yellow-legged frog clearance survey within the vicinity of Sand Creek. If foothill yellow-legged frogs are found within the project site or off-site improvement areas during the preconstruction surveys, or during construction activities, consultation with CDFW shall occur and a 2081 Incidental Take Permit shall be required. If foothill yellow-legged frogs are not found, further measures pertaining to foothill yellow-legged frogs are not necessary. All survey results shall be submitted to the City of Antioch Planning Division prior to the initiation of any construction activities or where construction has been halted for 30 days or more.</p> <p><i>Alternatively, the project applicant could comply with one of the following conditions:</i></p> <p><i>1. Comply with the applicable terms and</i></p>	LS

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.4-7 Have a substantial adverse effect, either directly or through habitat modifications, on Alameda whipsnake.	S	<p>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</p> <p>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.</p> <p>Multi-Generational Plan and Traditional Plan</p> <p>4.4-7(a) Prior to the start of construction, a qualified biologist shall conduct a training program for all construction personnel including contractors and subcontractors. The training shall include, at a minimum, a description of Alameda whipsnake and their habitats within the project area; an explanation of the species status and protection under State and federal laws; the avoidance and minimization measures to be implemented to reduce take of the species; communication and work stoppage procedures in case a listed species is observed within the project area; and an explanation of the importance of the Environmentally Sensitive Areas (ESAs) and Wildlife Exclusion Fencing (WEF). A fact sheet</p>	LS

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		conveying this information shall be prepared and distributed to all construction personnel. The training shall provide interpretation for non-English speaking workers. The same instruction shall be provided to any new workers before they are authorized to perform project work.	
		4.4-7(b) Prior to the start of each phase of construction, environmentally sensitive areas (ESAs) (defined as areas containing sensitive habitats adjacent to or within construction work areas for which physical disturbance is not allowed) shall be clearly delineated using high visibility orange fencing. The ESA fencing shall remain in place throughout the duration of the proposed action, while construction activities are ongoing, and shall be regularly inspected and fully maintained at all times.	
		4.4-7(c) A qualified biologist(s) shall be on-site during initial ground disturbance in portions of the project area that contain suitable habitat for Alameda whipsnake. If any Alameda whipsnakes are encountered during the initial grading, the snake shall be allowed to leave the construction area on its own.	
		4.4-7(d) Prior to the start of each phase of construction, wildlife exclusion fencing (WEF) shall be installed at the edge of	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>the project footprint in all areas where sensitive species could enter the construction area. The location of the fencing shall be determined by the contractor and the qualified biologist in cooperation with the USFWS and CDFW prior to the start of staging or ground-disturbing activities. A conceptual fencing plan shall be submitted to the USFWS and CDFW for review and approval prior to WEF installation. The location, fencing materials, installation specifications, and monitoring and repair criteria shall be approved by the USFWS and CDFW prior to start of construction. The WEF shall remain in place throughout the duration of the project and shall be regularly inspected and fully maintained. Repairs to the WEF shall be made within 24 hours of discovery. Upon project completion the WEF shall be completely removed, the area cleaned of debris and trash, and returned to natural conditions. An exception to the foregoing fencing measures is that for work sites where the duration of work activities is very short (e.g., three days or less) and that occur during the dry season, and the installation of exclusion fencing will result in more ground disturbance than from project activities, then the boundaries and access areas and sensitive habitats may be staked and flagged by the qualified biologist prior to disturbance and species monitoring would occur during all project activities at</p>	

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>that site. Modifications to this fencing measure may be made on a case-by-case basis with approval from the USFWS and CDFW.</i></p> <p><i>As an alternative to Mitigation Measures 4.4-7(a) through 4.4-7(d) above, 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> 	
4.4-8 Have a substantial adverse effect, either directly or through habitat modifications, on Blainville's horned lizard and silvery legless lizard.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p><i>4.4-8 Within 14 days prior to the initiation of any construction activities for each phase, a qualified biologist shall conduct preconstruction surveys for Blainville's horned lizards and silvery legless lizards. If Blainville's horned</i></p>	LS

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>lizards and/or silverly legless lizards are found prior to the initiation of, and/or during, construction activities, a qualified biologist shall relocate them outside of the project area, subject to review and approval by the appropriate resource agencies (i.e., CDFW, USFWS, and the City of Antioch Planning Division). All survey results shall be submitted to the City of Antioch Planning Division prior to the initiation of any construction activities or where construction has been halted for 30 days or more.</p> <p>Alternatively, the project applicant could comply with one of the following conditions:</p> <ol style="list-style-type: none"> 1. Comply with the applicable terms and conditions of the ECCC HCP/NCCCP, 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/NCCCP Covered Species; or 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. 	

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.4-9 Have a substantial adverse effect, either directly or through habitat modifications, on northwestern pond turtle.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p>4.4-9 Within 14 days prior to the initiation of any construction activities for each phase, a qualified biologist shall conduct preconstruction surveys for northwestern pond turtles. If northwestern pond turtles are found prior to the initiation of, and/or during, construction activities, a qualified biologist shall relocate them outside of the project area, subject to review and approval by the appropriate resource agencies (i.e., CDFW, USFWS, and the City of Antioch Planning Division). All survey results shall be submitted to the City of Antioch Planning Division prior to the initiation of any construction activities or where construction has been halted for 30 days or more.</p> <p>Alternatively, the project applicant could comply with one of the following conditions:</p> <ol style="list-style-type: none"> 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 	LS

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.4-10 Have a substantial adverse effect, either directly or through habitat modifications, on burrowing owl.	S	<p>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.</p> <p><i>Multi-Generational Plan and Traditional Plan</i></p> <p>4.4-10(a) Prior to the initiation of any construction activities for each phase during burrowing owl breeding season (February 1 through August 31), burrowing owl surveys shall be conducted by a qualified biologist walking the entire project site, including all off-site improvement areas, and (where possible) in areas within 150 meters (approx. 500 feet) of the proposed project impact zone. The 150-meter buffer zone is surveyed to identify burrows and owls outside of the proposed project area which may be impacted by factors such as noise and vibration (heavy equipment) during project construction. If the qualified biologist does not find evidence of burrowing owls, further mitigation is not required. All survey results shall be submitted to the City of Antioch Planning Division prior to the initiation of any construction activities or where construction has been halted for 30 days or more.</p>	LS

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>If the qualified biologist finds evidence of burrowing owls, all project-related activities shall avoid nest sites during the remainder of the breeding season or while the nest remains occupied by adults or young (nest occupation includes individuals or family groups foraging on or near the site following fledging). Avoidance is establishment of a minimum 300-foot buffer zone around nests. Construction and other project-related activities may occur outside of the 300-foot buffer zone. Construction and other project-related activities may be allowed inside of the 300-foot non-disturbance buffer during the breeding season if the nest is not disturbed, and the project activities are monitored by a qualified biologist and subject to review and approval by the appropriate resource agencies (i.e., CDFW, USFWS, and the City of Antioch Planning Division).</i></p> <p><i>If monitoring by the qualified biologist indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use, the non-disturbance buffer zone may be removed if approved by CDFW. The qualified biologist shall excavate the burrow in accordance with the latest CDFW guidelines for burrowing owl to prevent reoccupation subject to review and approval from CDFW.</i></p>	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>4.4-10(b) Prior to the initiation of any construction activities associated with the proposed project, including off-site improvements, during the burrowing owl non-breeding season (September 1 through January 31), the qualified biologist shall establish a minimum 300-foot non-disturbance buffer around identified occupied burrows. If the qualified biologist does not find evidence of occupied burrows, further mitigation is not required. Construction activities outside of the 300-foot non-disturbance buffer are allowed. Subject to review and approval by the appropriate resource agencies (i.e., CDFW, USFWS, and the City of Antioch Planning Division), construction activities within the non-disturbance buffer may be allowed if the following criteria are met to prevent owls from abandoning overwintering sites:</p> <ul style="list-style-type: none"> • A burrowing owl exclusion plan shall be developed for the project and approved by CDFW. The approved exclusion plan shall include the results of the preconstruction surveys and proposed methods for the installation and monitoring of one-way doors and the exclusion of burrowing owls; • Upon approval by CDFW a qualified biologist shall install a one-way door at the entrance of 	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>each occupied burrow. The burrows shall then be monitored twice daily for 48 hours to ensure that the owls have vacated the burrow. After the burrows have been vacated at the end of the 48-hour monitoring period the one-way doors shall be removed and the burrow shall be hand-excavated to its terminus and completely backfilled. The site shall then be monitored daily for one week to ensure that the site is not reoccupied by burrowing owls.</p> <p>Alternatively, the project applicant could comply with one of the following conditions:</p> <ol style="list-style-type: none"> 1. Comply with the applicable terms and conditions of the ECCC HCP/NCCCP, 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/NCCCP Covered Species; or 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. 	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.4-11 Have a substantial adverse effect, either directly or through habitat modifications, on Swainson's hawk and other nesting raptors.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p><i>4.4-11(a)</i> Within 14 days prior to the initiation of any construction activities for each phase, a qualified biologist shall conduct preconstruction nesting bird survey of all suitable habitat within the project area, including the off-site improvement areas, during the nesting season (February 1 – August 31). Preconstruction surveys shall be conducted within 0.5 mile of the project area for Swainson's hawk and 300 feet for other nesting raptors. If the qualified biologist does not find evidence of active nests, further mitigation is not required. All survey results shall be submitted to the City of Antioch Planning Division prior to the initiation of any construction activities or where construction has been halted for 30 days or more.</p> <p>If active nests are found, an on-site no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist in consultation with CDFW, but is recommended to be 300 feet for Swainson's hawk and other nesting raptors. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest, as determined by the qualified biologist. Once the young are independent of the nest, further measures are not</p>	LS

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>necessary.</p> <p>Preconstruction nesting bird surveys are not required for construction activity outside the nesting season.</p> <p>4.4-11(b) The grassland habitat present at the proposed project site is considered suitable foraging habitat for Swainson's hawks. The loss of potential Swainson's hawk foraging habitat shall be mitigated prior to issuance of a grading permit via the permanent preservation of Swainson's hawk foraging habitat pursuant to the CDFW's Mitigation Guidelines at a 1:1 ratio. Acceptable mitigation may include one of the following options:</p> <ul style="list-style-type: none"> The project applicant shall acquire Fee Title of Swainson's hawk habitat, or acquire the right to record a conservation easement over lands that can be managed for Swainson's hawk (hereinafter Habitat Management Lands). Any land acquired through Fee Title shall be donated to a suitable conservation organization for management and the applicant shall be assessed a management endowment fee for the long-term management of the Habitat 	

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>Management Lands by a CDFW-approved conservation organization; or</p> <ul style="list-style-type: none"> In lieu of fee title acquisition of mitigation land, or in lieu of recording a conservation easement over suitable Swainson's hawk foraging habitat, the applicant shall purchase Swainson's hawk mitigation credits from a CDFW-approved Swainson's hawk Conservation Bank. As there are no Swainson's hawk conservation banks that have a service area that covers the project site, an out of service area Swainson's hawk Conservation Bank shall be allowed as determined appropriate based on consultation with CDFW. <p>Alternatively, the project applicant could comply with one of the following conditions:</p> <ol style="list-style-type: none"> 1. Comply with the applicable terms and conditions of the ECCC HCP/NCCCP, 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/NCCCP Covered Species; or 2. Comply with a habitat conservation plan and/or 	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.4-12 Have a substantial adverse effect, either directly or through habitat modifications, on nesting special-status bird species and nesting common bird species.	S	<p><i>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>Multi-Generational Plan and Traditional Plan</i></p> <p><i>4.4-12 Within 14 days prior to the initiation of any construction activities for each phase, a qualified biologist shall conduct preconstruction nesting bird survey of all suitable habitat within the project area, including off-site improvement areas, during the nesting season (February 1 – August 31). Preconstruction surveys shall be conducted within 500 feet for tricolored blackbird, and 100 feet of the project area for nesting songbirds. If the qualified biologist does not find evidence of active nests, further mitigation is not required. All survey results shall be submitted to the City of Antioch Planning Division prior to the initiation of any construction activities or where construction has been halted for 30 days or more.</i></p> <p><i>If active nests are found, an on-site no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist in consultation with CDFW, but is recommended to be 50 feet for non-raptor songbirds. The buffer shall be</i></p>	LS

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>maintained until the fledglings are capable of flight and become independent of the nest. Once the young are independent of the nest, further measures are not necessary.</i></p> <p><i>Preconstruction nesting bird surveys are not required for construction activity outside the nesting season.</i></p> <p><i>Alternatively, 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/NCCCP, 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/NCCCP 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> 	

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.4-13 Have a substantial adverse effect, either directly or through habitat modifications, on American badger.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p><i>4.4-13 Within 14 days prior to the initiation of any construction activities for each phase, a qualified biologist shall conduct a preconstruction American badger survey within the project area. If American badgers or burrows with American badger signs are found within the project site or off-site improvement areas during the preconstruction surveys, consultation with CDFW shall occur prior to the initiation of any construction activities to determine an appropriate burrow excavation and/or relocation method. If American badgers are not found, further measures pertaining to American badgers are not necessary. All survey results shall be submitted to the City of Antioch Planning Division prior to the initiation of any construction activities or where construction has been halted for 30 days or more.</i></p> <p><i>Alternatively, 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/NCCCP, as determined in written "Conditions of Coverage" by the Conservancy, provided that the City has</i> 	LS

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>first entered into an agreement with the Conservancy for coverage of impacts to ECCC HCP/NCCCP Covered Species; or</p> <p>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.</p>	
4.4-14 Have a substantial adverse effect, either directly or through habitat modifications, on San Joaquin kit fox.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p>4.4-14 The project shall implement the following avoidance measures for potential effects on San Joaquin kit fox during construction, including construction of off-site improvements:</p> <ul style="list-style-type: none"> • Prior to any ground disturbance for each phase, a USFWS/CDFW-qualified biologist shall conduct a pre-construction survey within the proposed disturbance footprint and a surrounding 250-foot radius. The survey shall establish the presence or absence of San Joaquin kit foxes and/or suitable dens and evaluate use by kit foxes in accordance with USFWS survey guidelines (USFWS 1999). The pre-construction survey shall be conducted no more than 30 days prior to ground disturbance. 	LS

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>On the parcel where the activity is proposed, the biologist shall survey the proposed disturbance footprint and a 250-foot radius from the perimeter of the proposed footprint to identify San Joaquin kit foxes and/or suitable dens. Adjacent parcels under different land ownership are not required to be surveyed. The status of all surveyed dens shall be determined and mapped. Written results of pre-construction surveys shall be submitted to USFWS within 5 working days after survey completion and before the start of ground disturbance. Concurrence is not required prior to ground disturbance. If San Joaquin kit foxes and/or suitable dens are not identified in the survey area, further mitigation is not necessary. All survey results shall be submitted to the City of Antioch Planning Division prior to the initiation of any construction activities or where construction has been halted for 30 days or more.</i></p> <ul style="list-style-type: none"> <i>If San Joaquin kit foxes and/or suitable dens are identified in the survey area, the measures described below shall be implemented.</i> 	

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<ul style="list-style-type: none"> o If a San Joaquin kit fox den is discovered in the proposed development footprint, the den shall be monitored for 3 days by a USFWS/CDFW-qualified biologist using a tracking medium or an infrared beam camera to determine if the den is currently being used. o Unoccupied dens shall be destroyed immediately to prevent subsequent use. o If a natal or pupping den is found, USFWS and CDFW shall be notified immediately. The den shall not be destroyed until the pups and adults have vacated and then only after further consultation with USFWS and CDFW. o If kit fox activity is observed at the den during the initial 3-day monitoring period, the den shall be monitored for an additional 5 consecutive days from the time of the first observation to allow any resident animals to move to another den while den use is actively discouraged. For dens other than natal or pupping dens, use of the den can be discouraged by partially plugging the entrance with soil such that any resident 	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>animal can easily escape. Once the den is determined to be unoccupied it may be excavated under the direction of the biologist. Alternatively, if the animal is still present after 5 or more consecutive days of plugging and monitoring, the den may have to be excavated when, in the judgment of the biologist, it is temporarily vacant (i.e., during the animal's normal foraging activities).</p> <ul style="list-style-type: none"> If dens are identified in the survey area outside the proposed disturbance footprint, exclusion zones around each den entrance or cluster of entrances shall be demarcated. The configuration of exclusion zones should be circular, with a radius measured outward from the den entrance(s). Ground disturbance activities shall not occur within the exclusion zones. Exclusion zone radii for potential dens shall be at least 50 feet and shall be demarcated with four to five flagged stakes. Exclusion zone radii for known dens shall be at least 100 feet and shall be demarcated with staking and flagging that encircles each den or cluster of dens but does not prevent access to the den by 	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.4-15 Have a substantial adverse effect, either directly or through habitat modifications, on ringtail.	S	<p>4.4-15 Prior to the initiation of any construction activities for each phase, a qualified biologist shall conduct a preconstruction ringtail survey within the project area. If occupied ringtail dens are found within the project site or off-site improvement areas during the preconstruction surveys, the occupied dens shall be marked and mapped, and a 200-foot avoidance buffer shall be mapped around the occupied den. Occupied dens shall be monitored daily by a qualified biologist</p> <p>Alternatively, the project applicant could comply with one of the following conditions:</p> <ol style="list-style-type: none"> 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 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. 	LS

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>and destroyed after they are confirmed to be abandoned by ringtails. If occupied ringtail dens cannot be avoided, a qualified biologist shall passively relocate the ringtail from impact areas. If occupied ringtail dens are not found, further measures pertaining to ringtails are not necessary. All survey results shall be submitted to the City of Antioch Planning Division prior to the initiation of any construction activities or where construction has been halted for 30 days or more.</p> <p>Alternatively, the project applicant could comply with one of the following conditions:</p> <ol style="list-style-type: none"> 1. Comply with the applicable terms and conditions of the ECCC HCP/NCCCP, 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/NCCCP Covered Species; or 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. 	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.4-16 Have a substantial adverse effect, either directly or through habitat modifications, on special status bat species, including pallid bat, Townsend's big-eared bat, greater mastiff bat, and western red bat.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p><i>4.4-16 Prior to the initiation of any construction activities for each phase, including construction of off-site improvements, a qualified biologist shall conduct preconstruction roosting bat surveys for all suitable roosting habitat (i.e., trees and manmade structures) that would be impacted during construction activities. If impacted suitable roosting habitat is identified, a qualified biologist shall conduct an evening bat emergence survey that may include acoustic monitoring to determine whether bats are present. If pallid bat, Townsend's big eared bat, greater mastiff bat, and/or western red bat are found, consultation with CDFW shall be required prior to the initiation of any construction activities. If special-status bats are not found during the preconstruction surveys, further measures pertaining to special-status bat are not necessary. All survey results shall be submitted to the City of Antioch Planning Division prior to the initiation of any construction activities or where construction has been halted for 30 days or more.</i></p> <p><i>Alternatively, the project applicant could comply with one of the following conditions:</i></p>	LS

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<ol style="list-style-type: none"> 1. Comply with the applicable terms and conditions of the ECCC HCP/NCCCP, 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/NCCCP Covered Species; or 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. 	
4.4-17 Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to marshes, vernal pools, coastal, etc.) or waters of the State through direct removal, filling, hydrological interruption, or other means.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p><i>4.4-17</i> 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</p>	LS

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		occur at a minimum of 1:1 ratio for direct impacts; however, final mitigation requirements shall be developed in consultation with USACE. 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 Planning Division prior to the issuance of grading permits.	
4.4-18 Have a substantial adverse effect on Department of Fish and Wildlife Fish and Game Code Section 1602 jurisdictional areas.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p>4.4-18 Prior to the initiation of any construction activities within the project site and/or the off-site improvement areas that would impact features subject to CDFW Section 1602 jurisdiction (e.g., intermittent tributary [Sand Creek], ephemeral tributaries, and non-tributary ephemeral drainages), the applicant shall obtain a SBAA pursuant to Section 1602 of the California Fish and Game Code. The SBAA shall be obtained for any activity that would impact the bed, bank, or channel of any river, stream or lake. Mitigation measures shall be developed during consultation with CDFW as part of the SBAA permit process to ensure protections for affected fish and wildlife resources.</p>	LS

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>The following measures are required to minimize potential impacts to the bed, bank, or channel of rivers, streams, or lakes within the project site and/or the off-site improvement areas.</i></p> <ul style="list-style-type: none"> <i>The project shall be designed to maintain pre-project flows and prevent sedimentation downstream of the project.</i> <i>Potential light and noise impacts to Sand Creek shall be minimized through the use of setback buffers (minimum of 50 feet) as well as native plantings and landscaping. Lights shall be directed and/or shaded away from Sand Creek. The vehicular bridge crossing over Sand Creek shall have native plantings to reduce light pollution.</i> <p><i>Proof of compliance with the mitigation measure shall be submitted to the City of Antioch Planning Division prior to the issuance of grading permits.</i></p>	
4.4-19 Substantially interfere with movement of native, resident, or migratory fish or wildlife species or with established native resident or migratory wildlife corridors.	LS	<i>None required.</i>	N/A

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.4-20 Conflict with any local policies or ordinances protecting biological resources, such as the City of Antioch's Tree Preservation and Regulation Ordinance.	S	Multi-Generational Plan and Traditional Plan 4.4-20 Prior to the approval of each Tentative Map for The Ranch Project, a project level tree survey shall be prepared for the review and approval from the City of Antioch Planning Division. The project level tree survey shall identify how many, and indicate which trees are protected under the City of Antioch Tree Ordinance as "mature trees" or "landmark trees." In addition, the project level tree survey shall show compliance with the City of Antioch's Tree Preservation and Regulation ordinance, including grade cuts and fills, hardscapes, structures, and utility lines shall be located outside of the drip line of any trees being preserved within the project area. All survey results shall be submitted to the City of Antioch Planning Division prior to the approval of each Tentative Map.	LS
4.4-21 Conflict with an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.	NI	None required.	N/A

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.4-22 Cumulative loss of biological resources in the City of Antioch.	LS	None required.	N/A
4.5 Cultural Resources			
4.5-1 Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.	S	<i>Multi-Generational Plan and Traditional Plan</i>	LS
		4.5-1(a) Prior to tentative map approval, if development of the project would not occur in areas identified as containing portions of site P-07-000008 and/or Locus 1 of site P-07-000010, further mitigation is not necessary. However, if development of the project would occur in areas identified as containing portions of site P-07-000008 and/or Locus 1 of site P-07-000010, and the sites cannot be avoided or preserved, the City, the U.S. Army Corps of Engineers, and the qualified archeologist shall coordinate to determine the appropriate course of action, which could include data recovery, scientific analysis, and professional museum curation of material.	
		4.5-1(b) Prior to issuance of grading permits for any off-site improvements, the applicant shall hire an archaeologist meeting the Secretary of the Interior's professional standards for historical archaeology to conduct subsurface testing to determine the extent of the archaeological deposit of P-07-000008 within the	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>boundaries of the off-site improvement area. If deposits of P-07-000008 are not located within the boundaries of the off-site improvement area, further mitigation is not necessary. However, if deposits of P-07-000008 are located within the boundaries of the off-site improvement area and cannot be avoided, the City and the qualified archeologist shall coordinate to determine the appropriate course of action, which could include some combination of preservation in place, data recovery, and public interpretation.</i></p> <p><i>4.5-1(c) Prior to issuance of grading permits for any off-site improvements, the applicant shall hire an archaeologist meeting the Secretary of the Interior's professional standards for historical archaeology to determine the extent of the following recorded cultural resources within the boundaries of the off-site improvement area: RIA-001, RIA-002, RIA-003, RIA-004, and RIA-005. If the resources are not located within the boundaries of the off-site improvement area, further mitigation is not necessary. However, if any of the resources are located within the boundaries of the off-site improvement area, work shall not occur in the area until the qualified archaeologist completes a significance evaluation pursuant to Section 106 of the National Historic Preservation Act. If any of the resources are deemed</i></p>	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.5-2 Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 1564.5, directly or indirectly destroy a unique paleontological resource or unique geologic features, or disturb any human remains, including those interred outside of formal cemeteries.	S	<p>significant and cannot be avoided, the City and the qualified archeologist shall coordinate to determine the appropriate course of action, which could include some combination of preservation in place, data recovery, and public interpretation.</p> <p><i>Multi-Generational Plan and Traditional Plan</i></p> <p>4.5-2(a) <i>In the event that any prehistoric subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, animal bone, obsidian and/or mortars are discovered during earth-moving activities, all work within 100 feet of the resource shall be halted, and the applicant shall consult with a qualified archeologist. Representatives of the City and the qualified archeologist shall coordinate to determine the appropriate course of action. All significant cultural materials recovered shall be subject to scientific analysis and professional museum curation.</i></p> <p>4.5-2(b) <i>If a human bone or bone of unknown origin is found during earth-moving activities, all work shall stop within 100 feet of the find, and the County Coroner shall be contacted immediately. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission, who shall notify</i></p>	LS

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>the person most likely believed to be a descendant. The most likely descendant shall work with the contractor to develop a program for re-interment of the human remains and any associated artifacts. No additional work is to take place within the immediate vicinity of the find until the identified appropriate actions have taken place.</i></p> <p><i>4.5-2(c) If a Native American site is discovered, the evaluation process shall include consultation with the appropriate Native American representatives.</i></p> <p><i>If a Native American archeological, ethnographic, or a spiritual resource is discovered, all identification and treatment shall be conducted by qualified archeologists, who are certified by the Society of Professional Archeologists (SOPA) and/or meet the federal standards as stated in the Code of Federal Regulations (36 CFR 61), and are Native American representatives, who are approved by the local Native American community as scholars of the cultural traditions.</i></p> <p><i>In the event that no such Native American is available, persons who represent tribal governments and/or organizations in the locale in which resources could be affected shall be consulted. If historic archeological</i></p>	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>sites are involved, all identified treatment is to be carried out by qualified historical archeologists, who shall meet either Register of Professional Archeologists (RPA), or 36 CFR 61 requirements.</p> <p>4.5-2(d) The applicant shall retain the services of a professional paleontologist/archaeologist to educate the construction crew that will be conducting grading and excavation at the project site. The education shall consist of an introduction to the geology of the project site and the kinds of fossils, archeological, and/or Native American resources that may be encountered, as well as what to do in case of a discovery.</p> <p>Should any paleontological resources be unearthed by the construction crew, such as vertebrate fossils (e.g., teeth, bones), an unusually large or dense accumulation of intact invertebrates, or well-preserved plant material (e.g., leaves), then ground-disturbing activity shall be diverted to another part of the project site and the paleontologist shall be called on-site to assess the find and, if significant, recover the find in a timely matter. Finds determined significant by the 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</p>	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<i>leave the significant finds in place, determine the extent of significant deposit, and avoid further disturbance of the significant deposit. 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>	
4.5-3 Directly or indirectly disturb or destroy a unique tribal cultural resource, such as a site, feature, place, cultural landscape, sacred place or object with cultural value to a California Native American tribe.	S	Multi-Generational Plan and Traditional Plan 4.5-3 Implement Mitigation Measures 4.5-2(a) through (d).	LS
4.5-4 Cumulative loss of cultural and tribal resources.	LS	None required.	N/A
4.6 Geology, Soils, and Mineral Resources			
4.6-1 Exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong	S	Multi-Generational Plan and Traditional Plan 4.6-1(a) Prior to issuance of any grading permits, all recommendations set forth in the Geotechnical Exploration prepared for the proposed project shall be reflected on the project grading and foundation plans, subject to review and approval by the City Engineer.	LS

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
seismic ground shaking, seismic-related ground failure, including liquefaction, and landslides.		<p>4.6-1(b) 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 engineering report 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. The design-level report shall also include an analysis of the geologic hazards at the proposed bridge locations, including landslides, expansive/unstable soils, and seismic-related hazards such as liquefaction, and identify measures to address construction requirements to mitigate, at a minimum, groundshaking and unstable soils, including liquefiable and expansive soils. Measures to address the aforementioned geological concerns could include the following:</p> <ul style="list-style-type: none"> • The use of post-tensioned concrete mat foundations or similarly stiffened foundations systems which are designed to resist the deflections associated with soil expansion and liquefaction-induced settlement.; 	

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<ul style="list-style-type: none"> The over-excavation of soil, where existing structure foundations or non-engineered fill exist, in order to place the soil back on-site as engineered fill; and Soil borings and/or cone penetration tests within the development areas and laboratory soil testing to provide data for the preparation of specific recommendations regarding grading, foundations, and drainage for the proposed construction. 	
4.6-2 Risks to people and structures associated with expansive soils or 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 lateral spreading, or collapse.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p>4.6-2 Implement Mitigation Measures 4.6-1(a) and 4.6-1(b).</p>	LS
4.6-3 Risks associated with substantial erosion or loss of topsoil.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p>4.6-3 Prior to issuance of any grading permits, the project applicant shall submit, for review and approval by the City Engineer, an erosion control plan that uses standard construction practices to limit the erosion effects during construction of the proposed project. Measures shall include, but are not limited to, the</p>	LS

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>following:</p> <ul style="list-style-type: none"> • Hydro-seeding; • Placement of erosion control measures within drainageways 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; • 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. 	
4.6-4 Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State or of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.	LS	None required.	N/A

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.6-5 Cumulative increase in the potential for geological related impacts and mineral resource impacts.	LS	<i>None required.</i>	N/A
4.7 Hazards and Hazardous Materials			
4.7-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials within one-quarter mile of a school.	LS	<i>None required.</i>	N/A
4.7-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p>4.7-2(a) Prior to commencement of grading and construction, the construction contractor, the pipeline operator, and a representative from the City's Engineering Department shall meet on the project site and prepare site-specific safety guidelines for construction in the field to the satisfaction of the City Engineer. The safety guidelines and field-verified location of the pipelines shall be noted on the improvement plans and be included in all construction contracts involving the project site.</p> <p>4.7-2(b) Prior to commencement of grading and construction, all petroleum pipelines within the areas of the project site</p>	LS

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>planned for development shall be abandoned and/or removed in accordance with applicable federal, State, and/or local standards to the satisfaction of the Contra Costa County 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 regulatory residential screening levels, further action is not required.</p>	
		<p>4.7-2(c) Prior to issuance of a demolition permit by the City for any on-site structures, the project applicant shall</p>	

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>provide a site assessment that determines whether any structures to be demolished contain asbestos. If structures do not contain asbestos, mitigation is not required. If asbestos-containing materials are detected, the applicant shall prepare and implement an asbestos abatement plan consistent with federal, State, and local standards, subject to approval by the City Engineer, City Building Official, and the Bay Area Air Quality Management District.</p> <p>Implementation of the asbestos abatement plan shall include the removal and disposal of the asbestos-containing materials by a licensed and certified asbestos removal contractor, in accordance with local, State, and federal regulations. In addition, the demolition contractor shall be informed that all building materials shall be considered as containing asbestos. The contractor shall take appropriate precautions to protect his/her workers, the surrounding community, and to dispose of construction waste containing asbestos in accordance with local, State, and federal regulations subject to the City Engineer, City Building Official, and the Bay Area Air Quality Management District.</p>	
		4.7-2(d) Prior to issuance of a demolition permit by the City for any on-site structures, the project applicant shall	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>provide a site assessment that determines whether any structures do not contain lead-based paint. If structures do not contain lead-based paint, mitigation is not required. If lead-based paint is found, all loose and peeling paint shall be removed and disposed of by a licensed and certified lead paint removal contractor, in accordance with federal, State, and local regulations. The demolition contractor shall be informed that all paint on the buildings shall be considered as containing lead. The contractor shall take appropriate precautions to protect his/her workers, the surrounding community, and to dispose of construction waste containing lead paint in accordance with federal, State, and local regulations subject to approval by the City Engineer.</p> <p>4.7-2(e) Prior to any ground disturbance activities within 50 feet of the well on the project site, the applicant shall hire a licensed contractor to obtain an abandonment permit from the Contra Costa County Environmental Management Department, and properly abandon the on-site well and/or septic tank, pursuant to review and approval by the City Engineer.</p>	
4.7-3 Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code	NI	None required.	N/A

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TABLE 2-3 SUMMARY OF IMPACTS AND MITIGATION MEASURES			
Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.			
4.7-4 Interference with an adopted emergency response plan or emergency evacuation plan.	LS	<i>None required.</i>	N/A
4.7-5 Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	LS	<i>None required.</i>	N/A
4.7-6 For a project located within an airport land use plan, or within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.	NI	<i>None required.</i>	N/A
4.7-7 Cumulative increase in the number of people who could be exposed to potential hazards associated with wildfires and	LS	<i>None required.</i>	N/A

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
an increase in the transport, storage, and use of hazardous materials from development of the proposed project in combination with other reasonable foreseeable projects in the region.			
4.8 Hydrology and Water Quality			
4.8-1 Substantially alter the existing drainage pattern of the site or area, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems.	LS	<i>None required.</i>	N/A
4.8-2 Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality during construction.	LS	<i>None required.</i>	N/A
4.8-3 Violate any water quality standards or waste discharge requirements, provide	LS	<i>None required.</i>	N/A

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
substantial additional sources of polluted runoff, or otherwise substantially degrade water quality during operations.			
4.8-4 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge.	LS	<i>None required.</i>	N/A
4.8-5 Place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or flood hazard delineation map, or place within a 100-year floodplain structures which would impede or redirect flood flows.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p>4.8-5 <i>Prior to the approval of tentative maps for the project, if design plans for the pedestrian bridge and utility connections across Sand Creek do not feature piers or other forms of support within the 100-year floodplain of Sand Creek, further mitigation is not necessary. If design plans for the pedestrian bridge or utility connections across Sand Creek indicate that piers or other forms of support would be constructed within the 100-year floodplain of Sand Creek, the project applicant shall obtain the necessary permits for work within Sand Creek. In addition, prior to the issuance of the first building permit, a hydraulic study shall be conducted to assess the current streambed flow of Sand Creek and how the new infrastructure would affect the streambed and/or the 100-year floodplain. If the hydraulic study identifies improvements needed to the Sand Creek</i></p>	LS

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>channel, the applicant shall implement the improvements and obtain the necessary permits for work within Sand Creek. Furthermore, if the hydraulic study shows that the new infrastructure would affect the 100-year floodplain in a manner that would alter the FEMA flood hazard zone boundaries, the project applicant shall submit a map showing the updated flood hazard zone boundaries to FEMA for flood insurance purposes under the National Flood Insurance Program.</p> <p>Although alteration of the on-site flood hazard zone boundaries may occur, improvements that would result in an increase in floodwater surface elevations shall not occur off the project site. In the case that any proposed structures or stormwater basin berms on the project site would be located within the updated flood hazard zone boundaries, the project applicant shall obtain a Conditional Letter of Map Revision Based on Fill from FEMA that demonstrates that all proposed structures would be set above the base flood elevation.</p> <p>The hydraulic study, as well as confirmation that all necessary permits for work within Sand Creek have been obtained, shall be submitted to the City Engineer and Community Development Department for review and approval prior to issuance of the first building permit</p>	

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TABLE 2-3 SUMMARY OF IMPACTS AND MITIGATION MEASURES			
Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<i>for the construction of the pedestrian bridge and utility crossings.</i>	
4.8-6 Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.	LS	<i>None required.</i>	N/A
4.8-7 Inundation by seiche, tsunami, or mudflow.	NI	<i>None required.</i>	N/A
4.8-8 Cumulative impacts to hydrology and water quality.	S	<i>Multi-Generational Plan and Traditional Plan</i> <i>4.8-8 Implement Mitigation Measure 4.8-5.</i>	LS
4.9 Land Use and Planning/Population and Housing			
4.9-1 Physical division of an established community.	LS	<i>None required.</i>	N/A
4.9-2 Consistency with the Antioch General Plan.	LS	<i>None required.</i>	N/A
4.9-3 Consistency with existing zoning.	LS	<i>None required.</i>	N/A
4.9-4 Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an	LS	<i>None required.</i>	N/A

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
undeveloped area or extension of major infrastructure).			
4.9-5 Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere.	LS	<i>None required.</i>	N/A
4.9-6 Cumulative land use and planning policy consistency.	LS	<i>None required.</i>	N/A
4.9-7 Cumulative population and housing impacts.	LS	<i>None required.</i>	N/A
4.10 Noise			
4.10-1 Transportation noise at existing sensitive receptors.	LS	<i>None required.</i>	N/A
4.10-2 Transportation noise at new sensitive receptors.	S	Multi-Generational Plan and Traditional Plan 4.10-2(a) <i>In conjunction with submittal of Improvement Plans, the applicant shall show on the Improvement Plans that sound walls and/or landscaped berms shall be constructed along Deer Valley Road. The barrier heights shall be 8-feet in height for residences between the northern project boundary Road and Sand Creek Road. The specific height and location of the noise barrier shall be confirmed based upon the final approved site and grading plans. Noise barrier walls</i>	LS

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		shall be constructed of concrete panels, concrete masonry units, earthen berms, or any combination of these materials. Wood is not recommended due to eventual warping and degradation of acoustical performance. If roadway elevations and building pad elevations are not equal, the barrier heights and locations should be reviewed once grading plans are available for these locations. If multi-family residential is proposed along this area, common outdoor activity areas can be shielded by building facades as a means of achieving the exterior noise level standard. The Improvement Plans shall be subject to review and approval by the City Engineer.	
		4.10-2(b) Prior to the approval of the first Tentative Map for The Ranch Project, a detailed project level analysis of interior noise levels for the second-floor facades adjacent to Deer Valley Road shall be conducted to determine if the interior noise levels exceed the City of Antioch noise level standards presented in the City of Antioch General Plan, subject to review and approval by the City Engineer.	
4.10-3 Operational noise from activities on-site post development.	S	Multi-Generational Plan and Traditional Plan	SU
		4.10-3 Prior to the approval of the Village Center project, the applicant shall submit a site-specific noise study with an	

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<i>analysis of any significant noise generators and recommended measures to reduce the noise levels at all sensitive receptors to below the City's 60 dB L_{dn} exterior threshold and 45 dB L_{dn} interior threshold. Potential measures could include, but would not be limited to, inclusion of noise buffers in site design, restriction of two-story homes, or incorporation of noise-insulating building materials such as windows with a sound transmission class rating of 35-38 and resilient channels for walls. The site-specific noise study shall include mitigation measures necessary to reduce exterior and interior noise levels to the foregoing thresholds of significance. The site-specific noise study shall be subject to review and approval by the City of Antioch Community Development Department.</i>	
4.10-4 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.	LS	<i>None required.</i>	N/A
4.10-5 Substantial temporary or periodic increase in ambient noise levels in the project vicinity.	S	<i>Multi-Generational Plan and Traditional Plan 4.10-5(a) Noise-generating activities at the construction site or in areas adjacent to the construction site that are associated with the proposed project in any way shall adhere to the requirements of the City of Antioch Zoning Ordinance with respect to hours of operations, subject</i>	LS

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>to review and approval by the City Building Official. Specifically, construction activities shall not occur during the hours specified below:</p> <ul style="list-style-type: none"> • On weekdays prior to 7:00 AM and after 6:00 PM; • On weekdays within 300 feet of occupied dwellings, prior to 8:00 AM and after 5:00 PM; and • On weekends and holidays, prior to 9:00 AM and after 5:00 PM, irrespective of the distance from the occupied dwellings. 	
	4.10-5(b)	<p>Prior to issuance of the grading permit, the project contractor shall ensure that all intake and exhaust ports on power construction equipment shall be shrouded or shielded from sensitive receptors according to industry best practices, subject to review and approval by the City Building Official.</p>	
	4.10-5(c)	<p>Prior to issuance of the grading permit, the project contractor shall designate a disturbance coordinator and conspicuously post the coordinator's number around the project site and in adjacent public spaces, subject to review and approval by the City Building Official. The disturbance coordinator shall receive any</p>	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>and all public complaints about construction noise disturbances and shall be responsible for determining the cause of the complaint and implementing any feasible measures to be taken to alleviate the problem.</p> <p>4.10-5(d) Prior to the issuance of the grading permit, the applicants shall submit a construction-related noise mitigation plan to the City Building Official for review and approval. The plan shall depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of the project through the use of such methods as:</p> <ul style="list-style-type: none"> • The construction contractor shall use temporary noise-attenuation fences, where feasible, to reduce construction noise impacts on adjacent noise sensitive land uses. • During all project site excavation and grading on-site, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site. 	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<ul style="list-style-type: none"> The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site. The construction contractor shall prohibit unnecessary idling of internal combustion engines. 	
4.10-6 Aircraft noise.	NI	<i>None required.</i>	N/A
4.10-7 Cumulative impacts on noise-sensitive receptors.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p><i>4.10-7 Implement Mitigation Measures 4.10-2(a), 4.10-2 (b) and 4.10-5(a-d).</i></p>	LS
4.11 Public Services, Recreation, and Utilities			
4.11-1 Result in insufficient water supply.	LS	<i>None required.</i>	N/A
4.11-2 Result in inadequate wastewater capacity or the construction of new wastewater delivery, collection or treatment facilities, or	LS	<i>None required.</i>	N/A

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
expansion of existing facilities, which could cause significant environmental effects.			
4.11-3 Result in inadequate solid waste capacity to accommodate the project's solid waste disposal needs in compliance with applicable laws.	LS	<i>None required.</i>	N/A
4.11-4 Result in the need to construct new fire protection facilities.	LS	<i>None required.</i>	N/A
4.11-5 Result in the construction of new law enforcement facilities, the construction of which could cause a significant impact.	LS	<i>None required.</i>	N/A
4.11-6 Result in inadequate school capacity requiring the construction of new school facilities.	LS	<i>None required.</i>	N/A
4.11-7 Result in inadequate or substantial deterioration of parks and recreation facilities causing the need to construct new or expand existing facilities, the construction of which could cause significant	LS	<i>None required.</i>	N/A

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
impacts.			
4.11-8 Result in inadequate library services requiring the construction of new library facilities.	LS	<i>None required.</i>	N/A
4.11-9 Result in inadequate electricity and natural gas services requiring the construction of new facilities.	LS	<i>None required.</i>	N/A
4.11-10 Cumulative impacts on public services and utilities.	LS	<i>None required.</i>	N/A
4.12 Transportation and Circulation			
4.12-1 Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system during construction.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p><i>4.12-1 Prior to issuance of grading and building permits, the project applicant shall submit a Traffic Control Plan, subject to review and approval by the City Engineer. The requirements within the Traffic Control 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</i> 	LS

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**TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.12-2 Study intersections under the Existing Plus Project Condition.	S	<p><i>deliveries to avoid peak hours; lane closure proceedings; signs, cones, flaggers, and other warning devices for drivers; and designation of construction access routes;</i></p> <ul style="list-style-type: none"> <i>Permitted construction hours;</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> <p><i>Multi-Generational Plan and Traditional Plan</i></p> <p><i>4.12-2(a) Prior to issuance of building permits for Phase 1 of the proposed project, the project applicant shall fund installation of Adaptive Signal Control Technologies or other traffic signal interconnect systems approved by the City at the following intersections:</i></p> <ul style="list-style-type: none"> <i>Slatten Ranch Road at SR 4 Westbound Ramps;</i> <i>Slatten Ranch Road/Sunset Drive at Hillcrest Avenue;</i> <i>Hillcrest Avenue at SR 4 Eastbound Ramps; and</i> <i>East Tregallas Road/Larkspur Drive at Hillcrest Avenue.</i> 	SU

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p><i>The applicant shall fund the installation of Adaptive Signal Control Technologies or other traffic signal interconnect systems, and the City shall implement such systems in compliance with all relevant guidance from the U.S. Department of Transportation Federal Highway Administration, Caltrans, and the City, as applicable.</i></p> <p><i>4.12-2(b) Prior to issuance of building permits for Phase 1 of the proposed project, the project applicant shall pay regional transportation impact fees to the East Contra Costa Regional Fee and Financing Authority (ECCRFFA).</i></p> <p><i>4.12-2(c) Prior to issuance of building permits for Phase 1 of the proposed project, the project applicant shall pay its fair share to the City towards the signalization of the Deer Valley Road/Balfour Road intersection in conjunction with other planned improvements, which include the construction of a southbound left-turn lane, as well as separate westbound left and right-turn lanes.</i></p>	
4.12-3 Study freeway facilities under the Existing Plus Project Condition.	S	<i>Multi-Generational and Traditional Plan</i>	SU
4.12-4 Study intersections under the Near-Term Plus Project Condition.	S	<p><i>4.12-3 Implement Mitigation Measure 4.12-2(b).</i></p> <p><i>Multi-Generational Plan and Traditional Plan</i></p> <p><i>4.12-4(a) Implement Mitigation Measure 4.12-2(a).</i></p>	SU

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>4.12-4(b) Prior to issuance of building permits for Phase 1 of the proposed project, the project applicant shall contribute their fair share to intersection improvements at the Lone Tree Way/SR 4 Eastbound Ramp intersection that would result in acceptable operations, including widening the southbound off-ramp to provide a second right-turn only lane. In addition, traffic signals at the intersection shall be retimed. Given that widening of the southbound off-ramp could result in secondary impacts to pedestrians by increasing the pedestrian crossing distance, the potential secondary impact to pedestrians for all hours of the day shall be balanced against an intersection modification to improve vehicle travel during peak time periods. It should be noted that although the Lone Tree Way/SR 4 Eastbound Ramp intersection is located within the City of Antioch, the intersection is under the jurisdiction of Caltrans.</p>	
		<p>4.12-4(c) Prior to issuance of building permits for Phase 2 of the proposed project, the project applicant shall construct the Sand Creek Road extension between Deer Valley Road and the currently planned terminus at the Dozier-Libbey Medical High School. Completion of the extension would shift traffic from the Prewett Ranch Drive/Deer Valley Road intersection, resulting in acceptable operations at the intersection.</p>	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<p>4.12-4(d) Prior to issuance of building permits for Phase 3 of the proposed project, the project applicant shall pay regional transportation impact fees to the ECCRFFA that would fund construction of additional improvements at the Sand Creek Road/SR 4 Eastbound Ramps interchange, which includes a slip-ramp for the eastbound Sand Creek to southbound SR 4 movement and eliminating the conflicting left-turn movement at the intersection. Proof of payment shall be submitted to the City of Antioch Community Development Department.</p> <p>4.12-4(e) Implement Mitigation Measure 4.12-2(c) (Balfour Road/Deer Valley Road).</p>	
4.12-5 Study freeway facilities under Near-Term Plus Project Conditions.	S	Multi-Generational and Traditional Plan	SU
4.12-6 Would the project substantially increase traffic hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment), or result in inadequate emergency access.	LS	4.12-5 Implement Mitigation Measure 4.12-2(b). None required.	N/A

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.12-7 Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.	LS	<i>None required.</i>	N/A
4.12-8 Study intersections under the Cumulative Plus Project Condition.	S	<p><i>Multi-Generational Plan and Traditional Plan</i></p> <p><i>4.12-8(a) Implement Mitigation Measure 4.12-2(a) (Adaptive Signal Control Technologies).</i></p> <p><i>4.12-8(b) Prior to issuance of building permits for the proposed project, the project applicant shall pay regional transportation impact fees to the ECCRFFA that would fund construction of additional improvements along the SR 4 corridor. Such improvements may improve operations at the Hillcrest Avenue/ SR 4 Eastbound Ramps intersection.</i></p> <p><i>4.12-8(c) Prior to occupancy of the proposed buildings for Phase 2 of the proposed project, the project applicant shall restripe the westbound approach of the Lone Tree Way/Davidson Drive intersection to convert the westbound through lane to a left-thru shared lane. As the intersection currently operates with east-west split</i></p>	SU

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Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		<i>phasing, the traffic signal would not need to be modified.</i>	
		<i>4.12-8(d) Prior to issuance of building permits for Phase 1 of the proposed project, the project applicant shall modify the traffic signal at the intersection of Lone Tree Way/Hillcrest Avenue to provide a westbound right-turn overlap phase and a southbound right-turn overlap phase.</i>	
		<i>4.12-8(e) Implement Mitigation Measure 4.12-4(b) (Lone Tree Way/SR 4 Eastbound Ramps intersection).</i>	
		<i>4.12-8(f) Implement Mitigation Measure 4.12-4(d) (Sand Creek Road/SR 4 Eastbound Ramps intersection).</i>	
		<i>4.12-8(g) Implement Mitigation Measure 4.12-2(c) (Balfour Road/Deer Valley Road).</i>	
		<i>4.12-8(h) Prior to occupancy of the proposed buildings for Phase 1 of the proposed project, the project applicant shall construct the Sand Creek Road extension from Deer Valley Road to Dallas Ranch Road (one lane each way).</i>	

NI = No Impact; N/A = Not Applicable; LS = Less-than-Significant; S = Significant; SU = Significant and Unavoidable

TABLE 2-3 SUMMARY OF IMPACTS AND MITIGATION MEASURES			
Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.12-9 Study freeway facilities under Cumulative Plus Project Conditions.	S	Multi-Generational Plan and Traditional Plan	SU
4.12-10 Cumulatively conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.	LS	4.12-9 Implement Mitigation Measure 4.12-2(b). None required.	N/A

NI = No Impact; N/A = Not Applicable; LS = Less-than-Significant; S = Significant; SU = Significant and Unavoidable

**STAFF REPORT TO THE PLANNING COMMISSION
FOR CONSIDERATION AT THE MEETING OF APRIL 18, 2018**

Prepared by: Alexis Morris, Planning Manager

Date: April 13, 2018

Subject: Annual Election of Chair and Vice-Chair

RECOMMENDATION

It is recommended that the Planning Commission nominate and elect a Chair and Vice-Chair.

DISCUSSION

Pursuant to Section 9-5.2506 of the Municipal Code, the Commission shall elect a Chair and Vice-Chair at the last regular meeting of April each year. The new officers will assume their positions the first meeting of May.