

## CEQA ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Laurel Place IV Subdivision  
County File's #SD18-9495 and RZ18-3244
2. **Lead Agency Name and Address:** Contra Costa County  
Department of Conservation and Development,  
Community Development Division  
30 Muir Road  
Martinez, CA 94553
3. **Contact Person and Phone Number:** Francisco Avila, Senior Planner, (925) 674-7801
4. **Project Location:** 5175 Laurel Drive  
Concord, CA 94521  
Assessor's Parcel Number: 117-040-086
5. **Project Sponsor's Name and Address:** Lenox Homes, LLC (Applicant)  
3675 Mount. Diablo Boulevard., Suite 350  
Lafayette, CA 94549  
  
Harrel Trust (Owner)  
5175 Laurel Drive  
Concord, CA 94521
6. **General Plan Designation:** The subject property is located within a Single-Family Residential-Low Density (SL) General Plan Land Use designation.
7. **Zoning:** The subject property is located within a R-40 Single-Family Residential District (R-40).
8. **Description of Project:** The applicant is requesting approval of a 8-lot Vesting Tentative Map. The proposed tentative map identifies 8 lots ranging in size from 15,000 to 18,000 square feet in area. The lots will be accessed via a new 28-foot-wide private road. The project also proposes to rezone the subject lot from R-40 Single-Family Residential District to R-15 Single-Family Residential District. An Out of Area Service Agreement and/or an annexation into the City of Concord boundaries will be necessary in order extend wastewater services to the subject site.  
  
4,422 total cubic yards of soil will be graded and balanced on-site in order to create the building pads, roadway and related subdivision improvements. The removal of 30 trees will be necessary to construct the project. The project also includes an exemption request from County Ordinance Code, Division 914, Chapter 914-2.004 to be relieved of the off-site collect and convey requirements.
9. **Surrounding Land Uses and Setting:** The project site is within an approximately 190-acre pocket of unincorporated land located at the northeastern edge of the City of Concord. The general area lies between Bailey Road to the north and Kirker Pass Road to the south. The Concord Naval Weapons Station land is located approximately 1,100 feet northeast of the site. Parcels in the vicinity range in size from 10,000 square feet to over an acre and tend to be developed with residential uses. The Assessor's Parcel Number for the property is 117-040-086. The site consists

of 3.6 acres and is currently developed with one single-family residence and several accessory buildings/structures. 30 trees are scattered throughout the property. The site is generally rectangular in shape, 402 feet long, approximately 389 feet wide and has a 5-foot drop in grade elevation from the Laurel Drive frontage to the rear of the property.

**10. Other public agencies whose approval is required (e.g., permits, financing, approval, or participation agreement):**

- Building Inspection Division,
- Grading Division,
- Environmental Health Department,
- Consolidated Fire Protection District,
- Contra Costa Water District,
- City of Concord (for annexation and/or Out of Area Service Agreement for wastewater management),
- Public Works Department, and
- Contra Costa Local Agency Formation Commission.

**11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

In accordance with Section 21080.3.1 of the California Public Resources Code, a Notice of Opportunity to Request Consultation was sent on January 22, 2019, to the Wilton Rancheria, the one California Native American tribe that has requested notification of proposed projects within Contra Costa County. On February 28, 2019, staff received an email from the Wilton Rancheria requesting consultation for this project. Since that time, Wilton Rancheria has reviewed the Cultural Resources report and is in agreement with the mitigation measures prepared for the project.

### Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> Aesthetics                 | <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality               |
| <input checked="" type="checkbox"/> Biological Resources       | <input checked="" type="checkbox"/> Cultural Resources      | <input type="checkbox"/> Energy                               |
| <input checked="" type="checkbox"/> Geology/Soils              | <input type="checkbox"/> Greenhouse Gas Emissions           | <input type="checkbox"/> Hazards & Hazardous Materials        |
| <input type="checkbox"/> Hydrology/Water Quality               | <input type="checkbox"/> Land Use/Planning                  | <input type="checkbox"/> Mineral Resources                    |
| <input type="checkbox"/> Noise                                 | <input type="checkbox"/> Population/Housing                 | <input type="checkbox"/> Public Services                      |
| <input type="checkbox"/> Recreation                            | <input type="checkbox"/> Transportation                     | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input checked="" type="checkbox"/> Utilities/Services Systems | <input type="checkbox"/> Wildfire                           | <input type="checkbox"/> Mandatory Findings of Significance   |

### Environmental Determination

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that, although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

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Francisco Avila  
Senior Planner  
Contra Costa County  
Department of Conservation & Development

\_\_\_\_\_  
Date

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>1. AESTHETICS – Except as provided in Public Resources Code Section 21099, would the project:</b>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SUMMARY:**

a-b) The project proposes to subdivide the 3.6-acre residential property into 8 lots. One home has been constructed on this site since the early 1960s. Numerous outbuildings are scattered throughout the property. With approval of the project, it is expected that the site will be cleared and 8 new single-family homes will be built. It is anticipated that two differing floor plans will be offered for this subdivision, however, each of the models will be of a single-story design. As the project site is located within an area primarily developed with similar single-family homes, the proposed home designs will be compatible with the surrounding properties in terms of height, bulk and design.

Figure 5-4 (Scenic Routes Map) of the 2005-2020 Contra Costa County General Plan (General Plan) indicates that Kirker Pass Road is a designated scenic route. However, the project location is located approximately 3,000 feet to the north of Kirker Pass Road and at a 70-foot lower elevation, which eliminates the visual impact of the project as seen by travelers along that stretch of roadway. Additionally, the area between the project site and Kirker Pass Road is completely developed which will allow the proposed project to blend in with the immediate visual context. Therefore, the project would not represent a significant change in the quality of the Kirker Pass Road scenic route corridor.

Figure 9-1 (Scenic Ridges & Waterways) of the General Plan indicates that the subject site is located approximately 8,500 feet southwest of a designated scenic ridgeline. The ridgeline runs parallel to Kirker Pass Road and is at an elevation of 1,130 to 1,280 feet. The subject site is at an approximate elevation of 290 feet. Therefore, due to the substantial distance and elevation difference between the subject site and ridgeline, construction of 8 new residences will not be discernable from the ridgeline given the urban setting in which it is located.

All 30 trees located on the property will be removed in order to install the necessary subdivision improvements. Nevertheless, due to the relatively flat terrain, the potential new homes will be primarily visible to only contiguous properties and passerby along the Laurel Drive right-of-way. This change in visual setting will be minimized by the installation of typical privacy fencing and landscaping normally accustomed to single-family residential developments. Furthermore, the housing product proposed by the developer will consist of a single-story ranchette type of home that is not overly tall compared to the surrounding area. This type of visual change is consistent with Single-Family Residential Zoning Districts and Single-Family Residential General Plan land use designations. Nevertheless, incorporation of the following mitigation measures will ensure that the project once complete, will blend-in with neighboring properties and reduce any potential aesthetics impacts to less than significant levels.

**AES-1:** At least 30 days prior to applying for building permits for each new residence, the applicant/property owner shall submit a Compliance Verification application (only one application needed if developer constructs entire subdivision), for review and approval of Department of Conservation and Development, Current Planning Division (CDD) staff. The application must include construction drawings (e.g., site plan, floor plans, elevations and grading plans) to verify compliance with all mitigations and conditions of approval.

**AES-2:** At least 30 days prior to recordation of the final map, the applicant shall submit for the review and approval of CDD staff, a proposed deed restriction with the following height limitation. The approved deed restriction shall be recorded concurrently with the final map.

- a. Residential buildings on lots 1 through 8 shall be limited to 28 feet in height.

**AES-3:** At least 30 days prior to applying for residential building permits, the applicant shall provide for the review and approval of CDD staff color schemes that reflect the following:

- a. Building and roof colors shall be muted earth tone colors to blend in with the environment. A variety of colors shall be used to the extent feasible to break-up any monolithic facades.

- c) *In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Construction of eight new homes and removal of 30 trees throughout the property will be the major visual change as seen by the general public. However, residential developments in this area have continually occurred for decades and have established the character of the neighborhood. Construction of eight new residences that conform to the standards outlined in AES-2, on

conforming sized lots will generally be consistent with development patterns of the general area. The tree removal is necessary in order to install the required improvements (sidewalk and street, etc.) which will increase pedestrian safety for current and future residents. Although the removal of 30 trees will represent a visual change, none of the trees scheduled to be removed are of a height or location that establishes the character of the immediate environment. Therefore, the project will not substantially degrade the visual character or quality of the site or surrounding area. The project will have a less than significant impact on the visual characteristics of the site.

- d) *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Each new residence will have exterior lighting sources, however, lighting is not expected to be in excess of standard lighting for private residences. The lighting will provide the necessary light for safety and security at night. The subject property is located next to other single-family residences and, therefore, the proposed project is not expected to noticeably increase light or glare that could adversely affect day or nighttime visual characteristics in the area. Nevertheless, County Development Standards provide guidance on the type of lighting that would be appropriate for standard residential developments. All outdoor lighting shall be directed downward and screened away from adjacent properties and streets. Implementation of these development standards along with the following mitigation measure will reduce this impact to a level of less than significant.

**AES-4:** To the extent feasible, new residential lighting shall be low-lying and exterior lights on buildings shall be deflected so that lights shine onto the building site and not toward adjacent properties or offsite locations. The use of overly bright lighting shall be avoided.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>2. AGRICULTURAL AND FOREST RESOURCES – Would the project:</b>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Involve other changes in the existing environment, which due to their location or nature, could result in conversion of farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUMMARY:**

- a) *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

The land use of the subject property is entirely residential; no agricultural land uses are being conducted on the site, nor is the property zoned for any agricultural land uses. Figure 8-2 (Important Agricultural Lands) of General Plan indicates that the site is not located within an area designated as “Important Agricultural Lands”. The 2010 Contra Costa County Important Farmlands Map, published by the California Department of Conservation, indicates that the subject property is classified as “Urban and Built-up Land”; thus, there will be no Prime, Unique, or Farmland of Statewide Importance converted to non-agricultural uses as a result of the proposed subdivision, thus no impact.

- b-e) The site is not included in a Williamson Act contract, and the project does not propose any conversion of farmland or forestland to non-agricultural uses, nor will it result in the loss of any forest or timberland, since there is no timberland or timber production on the site. As mentioned above, the site is not zoned for agricultural land uses; the property is designated residential by the General Plan. Therefore, the project will have no impact to agriculture.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>3. AIR QUALITY – Would the project:</b>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUMMARY:**

a-b) The air quality plan applicable to the project area is the Bay Area Air Quality Management District's (BAAQMD) Bay Area 2017 Clean Air Plan (Clean Air Plan), which was adopted on April 19, 2017.<sup>1</sup> The Clean Air Plan is a comprehensive plan to improve Bay Area air quality and protect public health. The Clean Air Plan defines control strategies to reduce emissions and ambient concentrations of air pollutants; safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily affected by air pollution; and reduce greenhouse gas emissions to protect the climate. Consistency with the Clean Air Plan can be determined if the project: 1) supports the goals of the Clean Air Plan; 2) includes applicable control measures from the Clean Air Plan; and 3) would not disrupt or hinder implementation of any control measures from the Clean Air Plan. Due to the relatively small scope and residential nature of the project, the proposal would not conflict with or obstruct implementation of the Clean Air Plan. However, the BAAQMD requires the implementation of Construction Best Management Practices to ensure construction impacts are reduced to a less-than-significant level. Implementation of the following mitigation measure would require implementation of the BAAQMD's Best Management Practices and would reduce diesel PM exhaust emissions as well as construction dust (PM<sub>10</sub> and PM<sub>2.5</sub>) impacts to a less than significant level.

**AIR-1:** Consistent with the Best Management Practices required by the BAAQMD, the following actions shall be incorporated into construction contracts if required and specifications for the project:

- a. All haul trucks transporting soil, sand, or other loose material to and from the site shall be covered.
- b. All vehicle speeds on unpaved roads shall be limited to 15 mph.
- c. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- d. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]).
- e. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.
- f. A publicly visible sign shall be posted with the telephone number and contact information for the designated on-site construction manager available to receive and respond to dust complaints. This person shall report all complaints to Contra Costa County and take immediate corrective action as soon as practical but not more than 48 hours after the complaint is received. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

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<sup>1</sup> Bay Area Air Quality Management District, 2017. *Bay Area 2017 Clean Air Plan*. April 19, 2017.

c) *Would the project expose sensitive receptors to substantial pollutant concentrations?*

The analysis in this Initial Study uses the methodologies provided in BAAQMD's CEQA Air Quality Guidelines updated in 2017 (BAAQMD Guidelines). Although the BAAQMD's adoption of the significance thresholds in the BAAQMD 2011 Guidelines have been rescinded due to a legal decision that found proper CEQA review did not occur, the County has determined that Appendix D of the BAAQMD Guidelines, in combination with BAAQMD's Revised Draft Options and Justification Report, provide substantial evidence to support the thresholds, and therefore has determined they are appropriate for use in the analysis.

The BAAQMD is the responsible agency in the San Francisco Bay Area Basin (SF Basin) for compliance with federal and state quality standards. The Concord area is included in the SF Basin. Construction of a new single-family residence in an urbanized area generally is categorically exempt under the California Environmental Quality Act (CEQA) by a Class 3 exemption, but since the project involves the construction of 8 residences and associated improvements, the proposed subdivision is subject to review under CEQA. Any emission of particulate matter, fine particulate matter, and ozone precursors generated by this project would primarily be related to the construction activities that would be associated with the construction of each new single-family residence and related improvements, but these impacts would be temporary in duration, and once completed, each residence is expected to have a negligible impact in terms of ambient air quality. Nevertheless, the construction phase of the project will be restricted to specific days of the week and to a limited number of work hours per day to lessen the amount of time during the week that construction-related air quality impacts would affect the neighborhood. Therefore, the project related impacts to air quality will be less than significant with implementation of the following mitigation measure.

**AIR-2:** Non-emergency maintenance, construction, and other activities on the site related to this project are restricted to the hours of 7:30 A.M. to 5:00 P.M., Monday through Friday, and shall be prohibited on State and Federal holidays on the calendar dates that these holidays are observed by the State or Federal government as listed below:

- New Year's Day (State and Federal)
- Birthday of Martin Luther King, Jr. (State and Federal)
- Washington's Birthday (Federal)
- Lincoln's Birthday (State)
- President's Day (State and Federal)
- Cesar Chavez Day (State)
- Memorial Day (State and Federal)
- Independence Day (State and Federal)
- Labor Day (State and Federal)
- Columbus Day (State and Federal)
- Veterans Day (State and Federal)
- Thanksgiving Day (State and Federal)
- Day after Thanksgiving (State)
- Christmas Day (State and Federal)

For specific details on the actual day the state and federal holidays occur, please visit the following websites:

Federal Holidays:

[http://www.opm.gov/Operating\\_Status\\_Schedules/fedhol/2019.asp](http://www.opm.gov/Operating_Status_Schedules/fedhol/2019.asp)

California Holidays:

<http://www.ftb.ca.gov/aboutFTB/holidays.shtml>

- d) *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Objectionable odors are typically associated with agricultural or heavy industrial land uses such as refineries, chemical plants, paper mills, landfills, sewage-treatment plants, etc. There is nothing in the project description that would indicate that the proposal would be a source of objectionable odors beyond that which is ordinarily associated with the construction of single-family residential project; therefore, the project's impact to nearby sensitive receptors is considered less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>4. <i>BIOLOGICAL RESOURCES – Would the project:</i></b>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUMMARY:**

- a) *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

According to the 2005-2020 County General Plan, “Significant Ecological Areas and Selected Locations of Protected Wildlife and Plant Species Areas,” map, the project site is not part of any biologically sensitive area. The site is surrounded by residential development, effectively limiting the potential for long distance wildlife corridors to occur on-site. As this is an infill development, development of this site would not impact wildlife movement or any riparian habitats, marshes, wetlands, vernal pools, etc. The site is located well inland from the San Francisco and Suisun bays, and therefore no coastal resources will be affected by the proposal. However due to the site’s numerous suitable nesting trees, the project applicant will be required to conduct a pre-construction survey if construction is to occur during the nesting season (March 1 – September 15). Impacts to wildlife species would be reduced to less than significant levels by implementing the following mitigation measures.

**BIO-1:** In order to avoid impacts to special-status bats, a biologist shall survey all trees affected by the development (not just ones slated for removal) at least 15 days prior to commencing with any tree removal or earthwork that might disturb roosting bats in nearby trees. All bat surveys shall be conducted by a biologist with known experience surveying for bats. If no special-status bats are found during the surveys, then there would be no further regard for special-status bat species.

If special-status bat species are found on the project site, a determination will be made if there are young bats present. If young are found roosting in any tree, impacts to the tree shall be avoided until the young have reached independence. A non-disturbance buffer fenced with orange construction fencing shall also be established around the roost or maternity site. The size of the buffer zone shall be determined by a qualified bat biologist at the time of the surveys. If adults are found roosting in a tree on the project site but no maternal sites are found, then the adult bats can be flushed or a one-way eviction door can be placed over the tree cavity prior to the time the tree in question would be removed or disturbed. No other mitigation compensation would be required.

**BIO-2:** A nesting bird survey shall be conducted 15 days prior to commencing construction/grading or tree removal activities, if this work would commence between March 1 and September 15. If common passerine birds (that is, perching birds such as Anna’s hummingbird and mourning dove) are identified nesting on the project site, grading or tree removal activities in the vicinity of the nest shall be postponed until it is determined by a qualified ornithologist that the young have fledged and have attained sufficient flight skills to leave the area. The size of the nest protective buffer required to ensure that the project does not result in take of nesting birds, their eggs or young shall be determined by a qualified ornithologist. Typically, most passerine birds can be expected to complete nesting by June 15<sup>th</sup>, with young attaining sufficient flight skills by early July.

- b-d) There are no creeks, rivers, lakes, water bodies or riparian habitat of any kind on the site, or within one-third mile of the project, so the project will not interfere with the movement of any native resident or migratory fish or wildlife species; nor will the project interfere with any established native resident or migratory wildlife corridors, or impede the use of any wildlife nursery sites, thus the project will have no impact in this regard.
- e) *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

As mentioned above, the site is not listed as being within one of the County’s “Significant Ecological Areas and Selected Locations of Protected Wildlife and Plant Species Areas,” therefore, there is a low potential for the project to significantly affect biological resources. However, all 30 trees on-site will be removed in order to construct the necessary subdivision improvements (sidewalk, driveways, homes, etc.). No trees on site are suitable for preservation due to their local or exceptional stature. Therefore, due to the expected installation of landscaping (a mix of grasses, shrubs and trees) with home construction, the project represents a less than significant impact.

- f) *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Since the subject property is not located within the boundaries of the East County Habitat Conservation Plan (HCP/NCCP), the project is not within their purview. There are no HCPs or NCCPs overlays on the subject property, so there will be no impact.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>5. CULTURAL RESOURCES – Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SUMMARY:**

- a-c) The project will include construction of buildings, drainage features, utility trenches, and other soil-disturbing activities. In order to accomplish the construction phase of the project, the site will need to be cleared of all structures and vegetation. Figure 9-2 (Archaeological Sensitivity Map) of the Contra Costa County General Plan shows that the site is located in an area that is designated “largely urbanized and excluded from the archeological sensitivity survey”. Nevertheless, the applicant for the project has contracted Holman & Associates to prepare an Archaeological

Literature Search and Survey, dated May 7, 2019. The author conducted a records search at the Northwest Information Center of the California Historical Resources Information System (CHRIS), file number 18-160. All records of identified archaeological resources within a quarter of a mile, and all archaeological resources reports for projects within 50m (165ft.) of the project area were reviewed. Based on all available records and a field survey performed on April 24, 2019, the project area has a low to moderate potential for containing archaeological resources.

The applicant also contracted Preservation Architecture to prepare a Historic Resources Evaluation, dated May 15, 2019. Preparation of the report utilized property documentation, historical architectural research, and a field visit and reconnaissance. In sum, the report determined:

- The site has no historic potential, is not associated with any events or persons of any identifiable historical importance;
- Does not embody any identifiable design or construction distinction, nor is the planning or design of the site or any of its buildings the product of any identifiable planner, designer, architect, etc.;
- Nor is there any identifiable artistry or artistic intent, and
- The site has not yielded nor has any identifiable potential to yield prehistoric or historic information.

Although these studies have been conducted, there remains potential of encountering human remains or cultural resources on the site during construction activities such as trenching. With that understanding, on January 22, 2019, a Notice of Opportunity to Request Consultation was forwarded to Wilton Rancheria. Wilton Rancheria returned a request for consolation in the event a find is discovered. Wilton Rancheria has reviewed the cultural resources documentation for this project and is in agreement with the findings and mitigation measures. Therefore, with the mitigation measures described below, the project will result in a less than significant impact level with respect to cultural resources.

**CUL-1:** The following Mitigation Measures shall be implemented during project demolition/construction activities.

1. A program of on-site education to instruct all demolition/construction personnel in the identification of prehistoric and historic deposits shall be conducted prior to the start of any grading or construction activities.
2. If archaeological materials are uncovered during grading, trenching, or other onsite excavation, all work within 30 yards of these materials shall be stopped until a professional archaeologist who is certified by the Society for California Archaeology (SCA), and/or Society of Professional Archaeology (SOPA), and the Wilton Rancheria Tribe, have had an opportunity to evaluate the significance of the find and suggest appropriate mitigation(s) if deemed necessary.

**CUL-2:** Should human remains be uncovered during grading, trenching, or other on-site excavation(s), earthwork within 30 yards of these materials shall be stopped until the County coroner has had an opportunity to evaluate the significance of the human remains and determine the proper treatment and disposition of the remains. Pursuant to California Health and Safety Code Section 7050.5, if the coroner determines the remains may be those of a Native American, the coroner is responsible for contacting the Native American Heritage Commission (NAHC) by telephone within 24 hours. Pursuant to California Public Resources Code Section 5097.98, the NAHC will then determine a Most Likely Descendant (MLD) tribe and contact them. The MLD tribe has 48 hours from the time they are given access to the site to make recommendations to the land owner for treatment and disposition of the ancestor's remains. The land owner shall follow the requirements of Public Resources Code Section 5097.98 for the remains.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>6. ENERGY – Would the project:</b>				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUMMARY:**

- a) *Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation??*

The project includes construction of an 8 lot residential subdivision. As part of the construction phase of the development, contractors will be required to comply with the CalGreen / Construction & Demolition Debris Recovery Program. The program requires at least 65% by weight of job site debris to be recycled, reused, or otherwise diverted from landfill disposal. Operationally, the project is required to comply with Title 24 of the California Energy Code, which requires new energy efficiency technologies and methods to be incorporated in residential projects to conserve energy. Compliance with each of these programs suggests that the project will not result in wasteful use of energy during the construction or operation phases of the development.

- b) *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The State of California has taken steps to increase the efficiency of vehicles, buildings, appliances and to provide more renewable energy. Legislation is routinely passed and codified to address climate change and clean energy production. Based on the location and residential nature of the

project, there is no part of the application proposal that suggests it will impede any State or Local initiatives that aimed at increasing renewable energy or efficiency.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>7. GEOLOGY AND SOILS – <i>Would the project:</i></b>				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUMMARY:**

a) *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:*

i-ii) The San Francisco Bay Region is considered one of the most seismically active regions of the United States. Consequently, it can be assumed that the proposed improvements will be subject to one or more major earthquakes during their useful life. Earthquake intensities vary depending on numerous factors, including (i) earthquake magnitude, (ii) distance of site from the causative fault, (iii) geology of the site, and other factors. The USGS has stated that there is a 72 percent chance of at least one magnitude 6.7 or greater earthquake striking the Bay Region between 2014 and 2043.

The Contra Costa County General Plan Safety Element includes a figure titled “Seismic Ground Response” (page 10-13). This map classifies the site as Moderately Low damage susceptibility. This designation is applied to sites that are underlain by Pliocene bedrock or Pleistocene Alluvium. This assessment assumes sound structures sited on competent foundation materials, and with critical slopes stable. The risk of structural damage from earthquake ground shaking is controlled by building and grading regulations. The California Building Code (CBC) mandates that for structures requiring building permits (including the proposed residential buildings, retaining walls over 3 ft. in height and most types of accessory structures), the design must take into account both foundation conditions, proximity of active faults and their associated ground shaking characteristics. Design-level geotechnical reports must include CBC seismic design parameters. Those parameters are used by the structural engineer in the design of civil engineering structures. With conservative design and quality construction, ground shaking damage can be kept to a practical minimum.

As part of this application submittal, the developer submitted a Design Level Geotechnical Investigation prepared by Berlogar Stevens & Associates (BSA), dated February 15, 2017. The BSA field investigation consisted of a detailed site inspection, a series of exploratory borings and a general description of the site location. Per the BSA report, the site is not located within a State of California Earthquake Fault Zone which indicates that there are no known active faults crossing the site. The report and its findings have been peer reviewed by the County Geologist and found to provide sufficient information to justify the report’s conclusions. Design and construction recommendations provided as part of the BSA report are incorporated into the project as mitigation measure GEO-1. Nevertheless, the County Geologist has recommended five additional mitigations for the project to ensure that the development represents a less than significant impact with respect to geological considerations.

**GEO-1:** The applicant shall comply with all specific standards and criteria for use in design and construction of the project (site grading, drainage and foundation design, etc.) as identified in the February 15, 2017, BSA Design Level Geotechnical Investigation.

**GEO-2:** Prior to issuance of construction permits or installation of improvements, the project proponent shall submit an geotechnical update report that references proposed grading, drainage and foundation plans and provides specific criteria and standards for site grading, drainage and foundation design based on adequate subsurface data. The scope of the update geotechnical investigation should address the following potential hazards: (i) expansive soils, (ii) corrosive soils, (iii) design of bio-retention facilities and their effect on planned improvements, and (iv) provide California Building Code seismic parameters that are based on the adopted CBC at the time that residential building permits are requested. It is anticipated that the geotechnical engineer’s scope of work will demonstrate (v) that the expansivity and corrosivity of soils have been taken into account in grading and foundation design; (vi) that R-value testing has been

utilized for design of pavements, and (vii) include measures to protect pad areas from excessive moisture/ponding/surface runoff.

**GEO-3:** Concurrently with recordation of the Parcel Map, record a statement to run with deeds to the property acknowledging the BSA report by title, author (firm), and date, calling attention to conclusions, including the requirements for a design-level geotechnical investigation and noting that the report is available to prospective buyers from seller of the parcel.

**GEO-4:** The update geotechnical report shall be subject to review by the County's peer review geologist, and review/approval of the DCD staff. Improvement, grading and building plans shall carry out the recommendations of the approved report.

**GEO-5:** The geotechnical report required by GEO-2 routinely includes recommended geotechnical observation and testing services during construction. These services are essential to the success of the project. They allow the geotechnical engineer to (i) ensure geotechnical recommendations for the project are properly interpreted and implemented by contractors, (ii) allow the geotechnical engineer to view exposed conditions during construction to ensure that field conditions match those that were the basis of the design recommendations in the approved report, and (iii) provide the opportunity for field modifications of geotechnical recommendations (with BID approval), based on exposed conditions. The monitoring shall commence during clearing, and extend through grading, placement of engineered fill, installation of recommended drainage facilities, and foundation related work. A hard hold shall be placed on the "final" grading inspection, pending submittal of a report from the project geotechnical engineer that documents their observation and testing services during grading and drainage related improvements.

Similarly, a hard hold shall be placed on the final building inspection for each residence, pending submittal of a letter-report from the geotechnical engineer documenting the monitoring services associated with implementation of foundation-related geotechnical recommendations. The geotechnical monitoring shall include pier hole drilling/foundation preparation work/installation of drainage improvements (e.g., collection of roof gutter in a closed conduit and conveying it to a suitable discharge point; and possibly installation of a sub-drain system around the perimeter of the foundation to control moisture beneath the foundation).

**GEO-6:** All grading, excavation and filling shall be conducted during the dry season (April 15 through October 15) only, and all areas of exposed soils shall be revegetated to minimize erosion and subsequent sedimentation. After October 15, only erosion control work shall be allowed by the grading permit. Any modification to the above schedule shall be subject to review by the County Grading Inspector, and the review/approval of the CDD staff.

iii) *Seismic-related ground failure, including liquefaction?*

A secondary seismic hazard associated with earthquake shaking is the potential for strong ground shaking to trigger ground failure, including liquefaction of relatively loose, and relatively clay free sands that are saturated. The consequences of liquefaction can include differential settlement and lateral spreading failures. With regard to liquefaction potential, the Safety Element of the General Plan provides a map that divides Contra Costa County into three categories of liquefaction potential: “generally high,” “generally moderate to low,” and “generally low.”

This map was prepared by a geotechnical engineering firm under contract with the County that considered available data on soil types and the elevation of the water table, along with limited review of selected borehole logs for land development projects within the County. According to this map, the site and adjacent lands on the valley floor are classified generally moderate to low liquefaction potential. The bedrock in the Los Medanos Hills are classified generally low liquefaction potential. This liquefaction potential map in the General Plan is used as a “screening criteria” by Contra Costa County during the processing of land development applications, on a project-by-project basis. The County has consistently required rigorous evaluation of liquefaction potential in areas of high potential, and less comprehensive investigations in areas rated moderate to low liquefaction potential. The map attempts to be conservative of the side of safety. That is because project sites classified generally moderate to low are underlain by soils considered less likely to contain relatively loose, clay-free sands layers that are saturated. According to the County Peer Review Geologist, only 1 acre of every 1,000 acres in the moderate to low liquefaction potential category possess liquefiable sands.

A screening investigation normally involves evaluation of the subsurface conditions based on adequate subsurface exploration of the site. The deposits penetrated in the borehole are logged. The data gathered include (i) depth of water table, (ii) Standard Penetration Test blow counts, (iii) moisture/density testing, and (iv) gradation testing of sand layers. This technical data is utilized to draw preliminary conclusions regarding the need for a more rigorous/quantitative evaluation. Ordinarily, a screening investigation of this type would include one or more boreholes that are approximately 40-50 ft. deep (or to bedrock, whichever is less). Where liquefiable sands are confirmed to be present, the geotechnical report must provide stabilization measures. Therefore, as mentioned above, BSA performed borings at the site to evaluate the site characteristics. The boring results which included laboratory testing concluded that the potential for liquefaction is low due to the depth (50 feet) of groundwater and the clayey nature of the site soils.

iv) *Landslides?*

Landslides can be a concern on properties of substantial slope, however, the subject site is relatively flat. No contiguous properties have steep gradients, therefore, the project represents no risk of damage to property or safety to human beings as a result of the development.

b) *Would the project result in substantial soil erosion or the loss of topsoil?*

The project includes construction of 8 single-family homes and the associated roadway and drainage improvements. A Preliminary Stormwater Control Plan prepared by APEX Civil Engineering & Land Surveying, Inc., dated March 18, 2019, has been prepared for this project. The Stormwater Control Plan details the use of a bio-retention area between lots 4 and 5 to provide treatment and hydromodification. Drainage collected within the bio-retention area will then drain to three existing storm drain inlets that are connected to a 24-inch storm drain line that ultimately connects to a larger 36-inch storm drain main in the Karas Court to the north. The Stormwater Control Plan has been reviewed and accepted as preliminary complete by the Public Works Department. Any other minor alterations to the existing drainage patterns caused by the proposed project will require review and approval of the County Building Inspection Division and Public Works Department. Implementation of the final stormwater control plan suggests that rainwater runoff generated by the project will be appropriately drained and represent a less than significant impact with regards to soil erosion or the loss of topsoil.

The project also includes an exemption request from County Ordinance Code, Division 914, Chapter 914-2.004 to be relieved of the off-site collect and convey requirements for the drainage associated with the western corner of the site. A minor ridgeline within the western portion of the site diverts about 25% of the site drainage to Laurel Drive. As the property is mapped as being within drainage area 33B (DA33B), the intent is to have this western runoff continue along the north side of Laurel Drive and eventually into a storm drain system west of Ayers Road. However, when the lot to the west (9902 Malu Lane) was developed, an inlet was installed along its frontage that actually diverts the subject site's western drainage and a portion of Laurel Drive to another formed drainage area 33C. The proposed layout of the subject site corrects this situation and returns the site drainage back into the DA33B system (e.g., Karas Court).

In light of the above, in accordance with the requirements outlined in County Ordinance Code Chapter 92-6, the applicant submitted the exemption request. This request is supported due to the following:

1. Topographic constraints relative to the site as discussed above,
2. The infill nature of this project, and
3. There is residual capacity within the Karas Court drainage system to accept the diverted runoff.

Given the applicant's hydrological calculations, historical drainage patterns, topography of the site and stormwater control plan, granting of the exemption request would not be adverse to the neighboring properties or community in general.

c) *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

As mentioned in a and b above, the site's soil characteristics are not unstable due to off-site landslides, lateral spreading, subsidence or liquefaction.

- d) *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

The soils encountered in the BSA's borings were predominately silty and sandy clays. Single point swell testing was performed on two samples. One was collected at a depth of 2 feet and the other at 3 feet. The samples were loaded to 1,000 psf and then saturated. Both samples swelled 0.7% upon saturating. The results of the laboratory testing are indicative of soils having a moderate to high expansion potential. Thus, mitigation measure GEO-1 has been included into the project which provides design recommendations that once implemented will reduce the effects of expansive soils to less than significant levels.

- e) *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

Municipal waste water service is available to the site, therefore, the use of septic tanks or alternative wastewater disposal systems will not be necessary.

- f) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

No unique paleontological resources or unique geologic features have been identified on the site. Thus, no impacts to those resources is expected as a result of project.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>8. GREENHOUSE GAS EMISSIONS – Would the project:</b>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUMMARY:**

- a) *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Greenhouse gases (GHGs) are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO<sub>2</sub>);
- Methane (CH<sub>4</sub>);
- Nitrous oxide (N<sub>2</sub>O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulfur Hexafluoride (SF<sub>6</sub>).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally-occurring GHGs such as CO<sub>2</sub>, methane, and N<sub>2</sub>O, some gases, like HFCs, PFCs, and SF<sub>6</sub> are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere (“atmospheric lifetime”). The GWP of each gas is measured relative to CO<sub>2</sub>, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO<sub>2</sub> over a specified time period. GHG emissions are typically measured in terms of pounds or tons of “CO<sub>2</sub> equivalents” (CO<sub>2</sub>e).

**Construction Emissions.** Construction activities, such as site preparation, site grading, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew would produce combustion emissions from various sources. During construction of the project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. Furthermore, CH<sub>4</sub> is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

However, implementation of Mitigation Measures AIR-1 and AIR-2 would further reduce already less-than-significant construction GHG emissions by limiting construction idling emissions and duration of daily work. Therefore, given construction emissions will be temporary and at limited levels, the impact to GHG emissions as a result of the project is considered to be less than significant.

**Operational Emissions.** Long-term operation of the proposed project (residential uses) would generate GHG emissions from mobile sources and indirect emissions from sources associated with energy consumption. Mobile-source emissions of GHGs would include project-generated vehicle trips associated with future residents at the project site. Emissions would also be generated at off-site utility providers as a result of demand for electricity generated by the proposed project. However, the amounts of GHG emissions expected from the project will be below any conceivable threshold of significance and would be less than significant.

- b) *Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

In developing the threshold of significance for GHG emissions, the BAAQMD identified the emissions level for which a project would conflict with existing California legislation adopted to reduce Statewide GHG emissions. As indicated in the discussion presented above, the proposed project would not exceed the project-level significance criteria established by the BAAQMD and, therefore, the proposed project would not conflict with plans adopted for the purpose of reducing GHG emissions and this impact would be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>9. HAZARDS AND HAZARDOUS MATERIALS – <i>Would the project:</i></b>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUMMARY:**

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

The proposed project consists of subdividing the subject lot into 8 new parcels, and constructing eight new single-family residences on a site that is currently zoned for residential purposes. No industrial or commercial uses such as gas stations are proposed with this application. All utilities are available to the site which suggests that no routine transport of hazardous materials will be necessary to sustain the residential subdivision (e.g., propane). Compliance with the applicable building and fire codes implies that no undue risk will be introduced to the project as a result of construction of the anticipated new homes. Therefore, the project will not involve a significant increase in risks associated with transport of hazardous materials within the area.

- b) *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?*

The proposed 8 lot subdivision involves rezoning the subject property from one residential designation to another. No industrial uses or activities that involve significant amounts of hazardous material are associated with the proposal or allowable with the new higher density residential zoning district. Due to the site's past agricultural uses, the applicant has contracted AEI Consultants to prepare a Limited Phase II Subsurface Investigation, dated October 14, 2016. The investigation included collection of eight shallow soil borings. No ground water was encountered in the borings during drilling activities. No visual or olfactory evidence (e.g., soil discoloration, odor) of potential impacted soils was observed in any of the recovered soils during drilling activities. Soil samples were submitted to McCampbell Analytical, Inc. of Pittsburg, CA, for analyses. The analytical results from this investigation were compared to the February 2016 Environmental Screening Levels (ESLs) developed by the San Francisco Bay Regional Water Quality Control Board (RWQCB). The report concluded that minor residual concentrations of organochlorine pesticides (OCPs) associated with agricultural land uses are present within shallow soils at the site. However, with the exception of dieldrin, arsenic levels were representative of naturally-occurring background conditions for metals in San Francisco Bay Area soils (Duverge, 2011). Based on these concentration levels of all known OCPs (dieldrin included), the report concluded that no further investigation or remedial action is required.

In an abundance of caution, the report was forwarded to the San Francisco Bay Regional Water Quality Control Board, Groundwater Protection Division for a peer review of the findings. RWQCB staff indicated in an email dated, March 18, 2019, that the detected arsenic concentrations exceed the residential screening levels, however, due to absence of any obvious hotspots (based on the distribution of sampling results), the concentration levels observed at the site are a common occurrence and is consistent with background levels in the Bay Area. Therefore, based on all available data, the project represents a less than significant impact with regards to the unexpected release or exposure of hazardous materials to humans or the environment.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Ayers Elementary school and Myrtle Farm school are located within one quarter of a mile of the project site. Notwithstanding that fact, the project does not include the storage or transportation of any hazardous materials on a commercial scale. Typical chemicals such as herbicides and pesticides are expected as part of typical residential uses, however, no large quantities of chemicals will be stored or used as part of the construction phase of the project. Therefore, the project represents a less than significant impact with regards to release of hazardous materials.

- d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?*

The site is not listed as a hazardous materials site, thus no impact.

- e) *For a project located within an airport land use plan or, where such a plan has not yet been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

The subject property is not located within an airport land use plan area, thus no impact.

- f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed subdivision will be located completely within the boundaries of the subject property, and will not interfere with transport or access along any roadways or waterways that may be part of an emergency response or evacuation plan. The project does not propose to remove or alter any existing structures that may be an element of any existing emergency response or evacuation plan. Lastly, the proposed project will not negatively impact any communications methods that may be used during an emergency situation.

- g) *Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

The project site is not located within an area designated as forest land or within an area with a high fire danger designation. The Contra Costa County Fire Protection District has reviewed the project and returned basic subdivision comments such as “NO PARKING – FIRE LANE” requirements for the proposed access road. The Fire District’s comments did not include any concern regarding wildfire. Furthermore, the 8 lot subdivision proposal is located at an urban infill site which is not near any substantial vegetation that would represent an increase of wildfire risk.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>10. HYDROLOGY AND WATER QUALITY – Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUMMARY:**

- a-b) The proposed eight-lot subdivision is solely intended for residential activities. The proposed project will not produce any substances or other end products as part of its establishment. There will be no interaction between the proposed homes or infrastructure and any groundwater table or aquifer that may exist at the subject site. The project includes a request to annex or into an Out of Area Service agreement with the City of Concord for wastewater service. City of Concord staff has indicated that sufficient capacity exists to accommodate the addition of eight new residences at the site. Compliance with all applicable wastewater requirements and regulations suggests that the project will not violate any water quality standards or waste discharge requirements, therefore, the project represents a less than significant impact on the current wastewater system and ground water in general.
- c) *Would the project substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

i) *Result in substantial erosion or siltation on- or off-site?*

As mentioned in the Biological Section of this study, there are no bodies of water, or water features located on this site. Nevertheless, the applicant has submitted a stormwater control plan (SWCP) which has been deemed preliminarily complete by the Public Works Department. As described in the stormwater control plan, new impervious surfaces (driveways and new homes) will drain to the new vegetated bio-retention area. The rainwater runoff collected in this bio-retention area will be filtrated and treated prior to being released to existing drainage infrastructure. To support the drainage design, the applicant contracted Wenck Associates, Inc., dated October 3, 2018, to prepare a storm drain capacity analysis for the project. The report determined that there is capacity in the existing drainage system to accommodate the proposed additional runoff associated with the project. Any changes to the drainage plan will require review and approval of the Building Inspection Division and Public Works Department prior to construction. Therefore, the project will represent a less than significant impact with regards to erosion or siltation on or off-site.

ii) *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

The applicant has prepared a hydrological study which demonstrates that adequate capacity exists within the storm drain system to the north, to accommodate the stormwater runoff generated by the project. As mentioned above, the SWCP will slow out flows into the system to pre-project rates. Therefore, based on the approved SWCP, the project will not cause or contribute to flooding on or off-site.

iii) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

The applicant has prepared a hydrological study which demonstrates that adequate capacity exists within storm drain system DA33B to accommodate the stormwater runoff generated by the project. As mentioned above, the SWCP will slow out flows into the system to pre-project rates and filter pollutants prior to discharge into the system. Therefore, based on the approved SWCP, the project will not cause or contribute to flooding on or off-site.

iv) *Impede or redirect flood flows?*

The project is not within a designated flood zone area. Nevertheless, the project will not impede or redirect flood flows to areas outside of the property boundaries. Runoff from properties surrounding and adjacent to the project site would be diverted through existing topographic features or stormwater drainage improvements on the north and side of the property. Drainage from properties on the west will be directed away from the site as they are at a lower topographic elevation.

- d) *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The project would not be inundated by seiche, tsunami or mudflow. The available data indicates a reduction in the risk of a tsunami that is proportional to the distance from the Golden Gate and the western San Francisco Bay. There have been no recorded occurrences of a seiche wave in the project area.

- e) *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

A Storm Water Pollution Prevention Program (SWPPP) which incorporates Best Management Practices (BMPs) for the project is required by the Contra Costa County Building Inspection Division, Grading Section prior to issuance of grading permits for the construction phase of the project. County inspection during site preparation and construction would confirm the implementation and on-going maintenance of the SWPPP and BMPs and other pertinent County requirements related to water quality standards and waste discharge requirements. Therefore, the project will not result in significant impacts on water quality.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>11. LAND USE AND PLANNING – Would the project:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUMMARY:**

- a) *Would the project physically divide an established community?*

The project will not physically divide an established community since the project is proposed on a relatively small existing residential site within a well-developed neighborhood. No roadways or other features that could potentially create a physical division of the community are proposed, therefore there will be no impact. The project will not result in incompatible uses, as many of the surrounding properties have been developed with similar uses for many years. Rather, the project will be consistent with many other properties in the immediate vicinity.

- b) *Would the project cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

There are no land use plans applicable to the site. The subject property is not located within the East Contra Costa County Habitat Conservation Plan (HCP)/Natural Community Conservation (NCCP) coverage area. Therefore, there is no need for this project to be covered under the plan.

Therefore, the project will have no impact with regard to conflicting with any adopted land use plan within the County.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>12. MINERAL RESOURCES – Would the project:</b>				
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUMMARY:**

a-b) According to Figure 8-4 (Mineral Resource Areas) of the Contra Costa County General Plan, the subject property is not located within an area identified as a significant mineral resource area. Additionally, staff is unaware of any prior studies done at the subject property that indicate the potential presence of mineral resources.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>13. NOISE – Would the project result in:</b>				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUMMARY:**

a-b) The subject site is located within a well-developed residential neighborhood in unincorporated Concord. The Department of Conservation and Development Accela GIS system shows that the site is approximately 0.6 miles west of the nearest area experiencing 60 dB noise levels (Kirker Pass Road). The home-construction phase of the project has the potential to contribute to existing noise levels and possible ground vibrations in the area due to the use of heavy duty construction

equipment, vehicles, and tools, but this impact will be of a temporary duration. Once completed, the project will not significantly increase the noise levels beyond current levels experienced in the area since no loud noise-generating activities are proposed or associated with the residential nature of the project. Therefore, with implementation of Mitigation Measure AIR-2, the construction phase of the project will be restricted to specific days of the week and to a limited number of work hours in order to lessen the amount of time during the week that noise impacts would affect the neighborhood, so the impact is less than significant as mitigated.

- c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

The subject property is not located within an area covered by the Contra Costa County Airport Land Use Compatibility Plan, nor is the project located within 2 miles of an airport or private airstrip, so there will be no impact.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>14. POPULATION AND HOUSING – Would the project:</b>				
a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUMMARY:**

- a-b) The project proposes eight new single-family residences, which will allow for several new families to move into the neighborhood, but this would not be considered “substantial” population growth. The proposed subdivision map indicates that the developer will install a new sidewalk within the dedicated area. As part of the sidewalk and vehicular access road installation, the associated project utilities will be undergrounded. New hook-ups for sewer, water, and electrical service to the new residences have tentatively been routed on the proposed map. The proposal does not require the displacement of people or existing communities, nor requires the construction of new homes elsewhere. The proposed subdivision and residences are not anticipated to induce substantial population growth in the area; therefore the impact will be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>15. PUBLIC SERVICES – <i>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</i></b>				
a) Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUMMARY:**

*Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

a) *Fire Protection?*

The site is currently served by the Consolidated Fire Protection District. The District has reviewed the project and provided their comments and conditions relating to the proposed project, and no new or increased fire protection services were required, so the impact would be less than significant.

b) *Police Protection?*

The Growth Management Element, Section 4.4 of the County General Plan requires 155 square feet of Sheriff's station area and support facilities for every 1,000 members of the population; since there is only eight new residences proposed, the project would not increase the population up to this threshold. Therefore, the project would not increase the demand for police service facilities or require the construction or need for new police substations within the area, so the impact is considered less than significant.

c) *Schools?*

Impacts to schools are usually caused by significant increases in population. The subdivision and residences will not represent a substantial rate of population growth. Nonetheless, the developer will be required to pay a school developer fee for each lot prior to recordation of the map in order to offset any incremental increase in demand within the school system. The proposed project will produce eight new residences and associated fees, thus the impact is considered less than significant.

d) *Parks?*

The County General Plan requires that three acres of neighborhood parks be available for every 1,000 members of the population. The proposed project will not result in a significant increase in the County population, but the construction of eight new single-family residences will require the payment of a Park Impact Fee for each residence, which is used to acquire parkland and develop parks and recreation facilities to serve new residential development in the unincorporated areas of the County. Therefore the impact on parks and recreation is considered less than significant.

e) *Other public facilities?*

Impacts to other public facilities, such as hospitals and libraries are usually caused by substantial increases in population. Implementation of the proposed project is not anticipated to induce significant population growth since only eight new residences will result from project approval. The project is not anticipated to create substantial additional service demands besides those which have been preliminarily reviewed by various agencies of Contra Costa County, or result in adverse physical impacts associated with the delivery of fire, police, schools, parks, or other public services. Therefore, the impact to hospitals, libraries or other public facilities is less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>16. RECREATION</b>				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUMMARY:**

a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

Increased use of parks and other recreational facilities typically results from general population growth over time and from development of specific projects that significantly increase the number of people in the immediate vicinity of such facilities. Implementation of the proposed project is not anticipated to induce substantial population growth since only eight new residences will be built if approved. Nevertheless, fees will be required prior to recordation of the subdivision map that will be used to acquire parkland and develop parks and recreation facilities to serve new

residential development in the unincorporated areas of the County. Therefore, the impact is considered less than significant.

- b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?*

The project proposes to subdivide the subject site into eight total lots which will result in the construction of eight new homes. No recreational facilities are proposed as part of the project which would create substantial additional service demands on local parks or have an adverse physical effect on the environment; therefore, the impact will be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>17. TRANSPORTATION – Would the project:</b>				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUMMARY:**

- a) *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?*

The site is accessed via Laurel Drive which is a public roadway with no bicycle facilities or transit facilities. The nearest transit facilities are located on Kirker Pass Road and Ayers Road. The project includes frontage improvements (curb, gutter and sidewalk) which will improve pedestrian movement in the area. Both the County’s Public Works Department and Fire Department have reviewed the proposed pedestrian improvements and have determined that they comply with all applicable design standards (e.g., width, slope, line-of-site and fire apparatus turn-around).

The Contra Costa Transportation Authority (CCTA) Growth Management Plan and the County of Contra Costa (County) General Plan establish measures of effectiveness and requirements for the analysis and disclosure of circulation impacts associated with new land developments. Potential circulation impacts may be expected, and traffic impact analyses are required for projects that generate more than 100 or more than 100 net new peak-hour trips. A project generating less than 100 peak-hour trips generally will not create or exacerbate a significant circulation impact. Per the table below, the proposed project will generate less than 100 peak-hour trips, thus resulting in a less than significant impact.

<b>Rate</b>	<b>Single-Family Detached House (210)</b>
AM Peak Hour	0.74
PM Peak Hour	0.99
Weekdays	7
Rate Based on 8 Units	6 AM/8 PM Peak Hour Trips

Source: *Institute of Transportation Engineers, Trip Generation, 10<sup>th</sup> Edition.*

There is no potential for the proposed project to conflict with adopted policies, plans, or programs supporting alternative transportation. The proposed project would not alter the local infrastructure in a way that could hinder future establishment of public transportation. The project does not propose a design that would prevent the use of bicycles or other alternative modes of transportation, thus there would be no impact.

b) *Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?*

There are several available tools that assist planning staff when evaluating the vehicles miles traveled (VMT) of a specific project. The California Air Resources Board (ARB) has evaluated the existing tools (August 30, 2017, Report) and determined that based on the project type one tool may be more appropriate than another. As determined by the ARB report, the GreenTrip Connect tool provides a robust analysis of residential projects in any context area. By inputting the project details into the GreenTrip Connect program, it was determined that the residents of the project would not drive any more than the current Contra Costa County average for similar environmental contexts. According to the report results, the project would provide 23% more parking than what is otherwise provided in today's residential project's. Due to the additional parking provided it was determined that these parking spaces accounted for the induced demand for additional vehicles and miles traveled. Nevertheless, due to the project's infill nature, proximity to County Connection public transportation, and retail services, the project does not induce an overly high vehicles miles traveled expectation (41.45 miles per day expected, compared to 76 miles per day for low density projects, 35 miles a day for transit center locations and 15 miles per day for Urban Center sites). Therefore, due to the above analysis and results, the project is consistent with the methodology for evaluating the specific considerations of the project's transportation impacts and represents a less than significant impact.

c) *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

There are no increased hazards due to a design feature such as curves or intersections. The project's ingress/egress will be provided by a new private road within a 33.5-foot wide access and utility easement. Comments received from the Public Works Department stated that the design of the project conforms to applicable design standards. The Contra Costa Fire Protection District has also reviewed the project for conformance with the Fire District standards, which include emergency access, and no comments of concern were received. Therefore, the project will have a less than significant impact.

d) *Would the project result in inadequate emergency access?*

The Contra Costa Fire Protection District has reviewed the project for conformance with the Fire District standards, which include emergency access, and no comments of concern were received. Therefore, the project will have a less than significant impact.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>18. TRIBAL CULTURAL RESOURCES – <i>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</i></b>				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUMMARY:**

*Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*

a-b) As discussed in the Cultural Resources section of this initial study, the project site has numerous improvements/structures, which were originally built in the early to mid-1900's. None of these structures are a state or local historical resource. Additionally, the project site is considered urbanized and has no discernable archaeological or paleontological features; however, there is a possibility that buried archaeological or paleontological resources, or human remains could be present and accidentally discovered during grading or other earthwork. Therefore, the applicant is required to implement mitigation measures CUL-1 and CUL-2, which will result in a less than significant impact to Tribal Cultural Resources.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>19. UTILITIES AND SERVICE SYSTEMS – Would the project:</b>				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUMMARY:**

- a) *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?*

The proposed subdivision is expected to result in the construction of eight new single-family residences. As proposed, the project will not require the construction of new utility facilities or the expansion of existing facilities. All responsible utilities have returned Agency Comments and have indicated that capacity exists to serve the project. Additionally, all utilities are available to the development at the project boundaries, which will require minimal ground disturbance. Thus the impact is considered to be less than significant.

- b) *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?*

The subject property currently receives water service from the Contra Costa Water District (CCWD). As proposed, the project will require connection to the existing water main, in compliance with the applicable California Building Codes. CCWD reviewed the project and submitted comments indicating that water service could be supplied to the new residences without the requirement of new or expanded facilities, so the impact will be less than significant.

- c) *Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

The project includes subdividing a 3.6-acre property into eight new residential lots. One existing single-family residence and associated accessory buildings/structures are currently located on the property and will be removed in order to construct the new subdivision. No municipal sewer service is presently serving the property, however the subject site is contiguous to the City of Concord boundaries which affords the project an opportunity to annex into the City of Concord boundaries or enter into an Out of Area Service Agreement in order to receive wastewater services. Either of these options will require approval from the Contra Costa Local Agency Formation Commission (LAFCO). City of Concord staff has issued a Will Serve Letter indicating that wastewater services are available to the development.

Addition of 8 new residences to the site will generate approximately 270 gallons/day/home (2,160 per day total) of wastewater. The Will Serve Letter suggests that there is adequate capacity within the system to accommodate the new flow amounts. The actual physical work needed to connect the site to the existing 8-inch sewer main within the Laurel Drive right-of-way has very little potential for degrading the quality of the environment, reducing habitat, or plant/animal communities, or eliminating examples of California history, as the right-of-way has been paved and completely disturbed for many years. An 8-inch sewer main extension will connect to the existing sewer main and will be centrally located within the newly created public access and utility easement for the project. Once the new sewer main extension is constructed, 4-inch laterals will be extended to each new residence. Sanitary sewer clean outs will be installed and all connection fees will require payment.

No part of the project will change the existing use of the site from residential to a more intense use (e.g., commercial or industrial), therefore, it is not anticipated that any unexpected demands will be placed on the City of Concord wastewater infrastructure. Adjacent properties are consistent with the residential zoning of this site and are developed with similar residential uses. No agricultural or open space uses will be depleted as part of the construction of the project or on-going residential use of the site. Therefore, given that existing municipal wastewater treatment services are available for the project, the development represents a less than significant impact.

- d-e) *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

The subject property is currently designated as residential and will be used for residential-related land uses if the proposed subdivision is granted. Future development at the site would be limited to the land uses and structures permitted within the applicable residential zoning district, and will be limited in scale due to the relatively small size of the project site. Surrounding properties are similar in size and include similar residential uses. Due to the relatively small scope of the project, the project is not expected to generate significant amounts of solid-waste that would impact local landfills that serve the area, therefore, the development represents a less than significant impact.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>20. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</b>				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUMMARY:**

a-d) The project site is not located within an area of state responsibility or classified as very high fire hazard severity zone. The project involves construction of 8 new single-family residences within an urbanized area. All major roadways are well established and will not be impeded by any design element of the project. The private access road and project as a whole has been reviewed by the Contra Costa County Fire Protection District and no concerns were identified. Therefore, the project will not impair an adopted emergency plan, expose project occupants to wildfire pollutants, or expose people or structures to flooding or post-fire slope instability.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>21. MANDATORY FINDINGS OF SIGNIFICANCE</b>				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SUMMARY:**

- a) *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?*

As proposed, the project includes a request to subdivide the subject site into eight residential lots. The project conforms to the SH General Plan designation’s density and intended residential use. The project also includes a request to rezone the site from its current R-40 zoning to R-15. The new lots will meet the development standards as set forth by the R-15 Zoning District in terms of lot size, average width and depth. Construction of eight new residences and associated improvements will not significantly change the visual character of the area. Removal of 30 trees will not significantly affect the resource as the project is considered an in-fill project.

Since the project site has been completely disturbed by its occupants and is devoid of any water features, the project would have a less than significant potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. Furthermore, the project does not have the potential to significantly eliminate important examples of any major period of California history and prehistory, therefore the impact is less than significant. Nevertheless, given an abundance of caution, all potential impacts can be reduced to less than significant levels with mitigation measures identified in this document. The proposal when reviewed cumulatively is a less than significant impact on the environment.

- b) *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)*

The project involves creation of eight new lots that include new residences, roads, grading, retaining walls, drainage and sidewalk improvements, however, there are no improvements proposed that will be incompatible with the existing environment or area in which it is located. The proposed project and construction implications of the infrastructure has been analyzed as part of this study, and were found to have a less than significant impact on the environment. Staff is not aware of any other substantial projects in the immediate vicinity that may cumulatively affect utilities, roadways or the environment. Therefore, the project represents a less than significant cumulative impact.

- c) *Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?*

The project as proposed will not significantly impact the environment. Furthermore, no evidence has been found that would indicate that the project would have a potential to cause substantial adverse effects on human beings, whether directly or indirectly, thus the impact will be less than significant.

## REFERENCES

In the process of preparing the Initial Study Checklist and conduction of the evaluation, the following references (which are available for review at the Contra Costa County Department of Conservation and Development, 30 Muir Rd., Martinez, CA 94553) were consulted:

1. Application received by Contra Costa County on August 1, 2018.
2. Revised Vesting Tentative Map date stamped February 27, 2019.
3. Contra Costa County General Plan 2005-2020
4. Contra Costa County Code – Title 8 Zoning Ordinance
5. Contra Costa County Geographic Information System
6. Contra Costa County Land Information System
7. *Contra Costa County Important Farmland Map 2008* prepared by the California Department of Conservation
8. Public Resources Code section 12220(g)
9. Public Resources Code section 4526
10. Government Code section 51104(g)
11. California Environmental Quality Act (CEQA) as amended January 1, 2019.
12. Bay Area Air Quality Management District CEQA Guidelines dated May 2011 (Updated 2017).
13. Bay Area Air Quality Management District proposed Thresholds of Significance for Greenhouse Gas Emissions
14. California Department of Toxic Substances Control website
15. Association of Bay Area Governments Geographic Information Systems, Hazard Maps – Wildland Urban Interface Fire Threat
16. Federal Emergency Management Agency Flood Insurance Rate Map
17. Association of Bay Area Governments Geographic Information Systems, Hazard Maps – Dam Failure Inundation Areas
18. Agency Comments
19. Preliminary Title Report, prepared by Old Republic Title Company, dated June 28, 2018.
20. Laurel Place Stormwater System Analysis, prepared by WENCK, dated October 3, 2018.
21. Limited Phase II Subsurface Investigation, prepared by AEI Consultants, dated October 14, 2016.
22. Design Level Geotechnical Investigation, prepared by BSA, dated February 15, 2017.
23. Storm Water Control Plan, prepared by APEX, dated December 28, 2018.
24. Contra Costa County Code – Title 4 Health and Safety
25. Methods to Assess Co-Benefits of California Climate Investments, Vehicle Miles Traveled, prepared by California Air Resources Board, dated August 30, 2017.
26. GreenTrip Connect Online Tool.
27. Archaeological Literature Search and Survey, by Holman & Associates, dated May 7, 2019.
28. Historical Resources Evaluation, by Preservation Architecture, dated May 15, 2019.

## **ATTACHMENTS**

- 1. Vicinity Map**
- 2. Project Plans**