

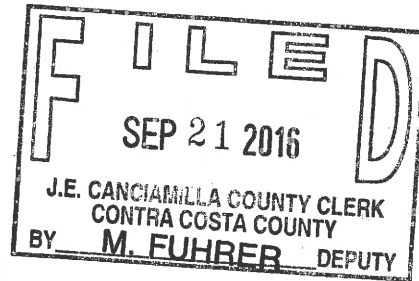
# Negative Declaration/Environmental Review and Agency Response (1)

**Department of  
Conservation and  
Development**

30 Muir Road  
Martinez, CA 94553

Phone:1-855-323-2626

**Contra  
Costa  
County**



**John Kopchik**  
Director

**Aruna Bhat**  
Deputy Director

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Deputy Director

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Deputy Director

**Kara Douglas**  
Assistant Deputy Director

**Victoria Mejia**  
Business Operations Manager

September 21, 2016

**NOTICE OF INTENT TO ADOPT A  
NEGATIVE DECLARATION**

Pursuant to the State of California Public Resources Code and the "Guidelines for Implementation of the California Environmental Quality Act of 1970" as amended to date, this is to advise you that the Department of Conservation & Development of Contra Costa County has prepared an Initial Study to assess the potential environmental impacts of the following project:

GLORIA TERRACE LLC. (Applicant & Owner), H.F. LAYTON (Co-Owner), County File #SD16-9429: The applicant is requesting approval of a 9-lot Vesting Tentative Map. The proposed tentative map identifies 9 lots ranging in size from 22,608 to 73,301 square feet in area. The lots will be accessed via a new private road to be constructed within the subject site and a 20 foot wide access easement. The new private road will be constructed to County private road standards and will include a sidewalk, curbs and gutters. The private road, drainage features and other common areas will be maintained by a homeowners association created for the subdivision.

18,000 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 16 trees and work within the dripline of 30 other trees will be necessary to construct the project. Off-site shoulder improvements will also occur along Gloria Terrace to improve pedestrian safety along this stretch of road.

The subject site is located on the east side of Gloria Terrace 1,250 feet northwest of the Taylor Boulevard/Gloria Terrace intersection, in the Lafayette area. The assessor's parcel numbers for the site are 166-200-032 and 166-210-008. The property consists of 7.5 total acres and is currently vacant. 83 trees are scattered throughout the property. The site is generally rectangular in shape, 900 feet long, 400 feet wide and straddles the top and steep sides of a natural ridgeline. The top of the ridgeline has an elevation of 457 feet. There is a linear valley approximately 60 feet wide along the southeastern portion of the property. This valley begins at an elevation of approximately 300 feet and extends up to an elevation of approximately 380 feet. The site is accessed by a combination of a panhandle shaped portion of the property (200 feet long by 50 feet), which abuts Gloria Terrace and a parallel 20-foot wide access easement over APN: 166-200-026. Parcels in the vicinity range in size from 0.50-acres to over 3-acres and tend to be developed with residential uses.

(over)

The County has determined that the proposed project will not result in significant environmental impacts and has therefore prepared a Mitigated Negative Declaration pursuant to California Code of Regulations Section 15070.

A copy of the Mitigated Negative Declaration, Initial Study, and all documents referenced therein may be reviewed in the offices of the Department of Conservation & Development located at the 30 Muir Road, Martinez, during normal business hours.

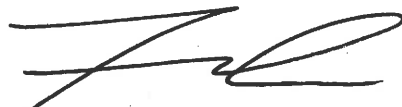
**Public Comment Period** – The period for accepting comments on the adequacy of the environmental document extends to **5:00 P.M., Friday, October 21, 2016**. It is preferable that comments be in writing. Written comments must be submitted to the following address:

Francisco Avila, Senior Planner  
Department of Conservation & Development  
Community Development Division  
30 Muir Road  
Martinez, CA 94553

It is anticipated that the proposed Negative Declaration will be considered for adoption at a meeting of the County Planning Commission on **Tuesday, December 6, 2016**. The anticipated site of the hearing is 30 Muir Road, Martinez, California. It is expected that the Planning Commission will conduct a hearing on the proposed project at the same meeting.

If you have any questions regarding this notice or the proposed project, please do not hesitate to contact me at (925) 674-7801 or [Francisco.avila@dcd.cccounty.us](mailto:Francisco.avila@dcd.cccounty.us).

Sincerely,



Francisco Avila  
Senior Planner

Cc: 2 Copies County Recorder  
Distribution List  
Adjacent Occupants and Owners

Attachment: Vicinity Map  
General Plan/Zoning Map

**California Environmental Quality Act  
Environmental Checklist Form**

1. Project Title: Gloria Terrace Estates  
County File #SD16-9429
2. Lead Agency Name and Address: Contra Costa County  
Department of Conservation & 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: 3198 Gloria Terrace, Lafayette  
Lafayette, CA 94549  
APN's: 166-200-032, 166-210-008 & 166-200-026
5. Project Sponsor's Name and Address: Gloria Terrace LLC (Co-Owner and Applicant)  
3189 Danville Boulevard, Suite 245  
Alamo, CA 94507  
  
H.F. Layton (Co-Owner)  
191 Sand Creek Road #220  
Brentwood, CA 94513
6. General Plan Land Use Designation(s): The subject property is located within a Single-Family Residential-Low Density District (SL) General Plan Land Use designation.
7. Zoning: The subject property is located within the R-20 Single-Family Residential District (R-20).
8. Setting, Site Description, Access & Surrounding Land Uses: The subject site is located on the east side of Gloria Terrace 1,250 feet northwest of the Taylor Boulevard/Gloria Terrace intersection, in the Lafayette area. The assessor's parcel numbers for the site are 166-200-032 and 166-210-008. The property consists of 7.5 total acres and is currently vacant. 83 trees are scattered throughout the property. The site is generally rectangular in shape, 900 feet long, 400 feet wide and straddles the top and steep sides of a natural ridgeline. The top of the ridgeline has an elevation of 457 feet. There is a linear valley approximately 60 feet wide along the southeastern portion of the property. This valley begins at an elevation of approximately 300 feet and extends up to an elevation of approximately 380 feet. The site is accessed by a combination of a panhandle shaped portion of the property (200 feet long by 50 feet), which abuts Gloria Terrace and a parallel 20-foot wide access easement over APN: 166-200-026. Parcels in the vicinity range in size from 0.50-acres to over 3-acres and tend to be developed with residential uses.
9. Project Description: The applicant is requesting approval of a 9-lot Vesting Tentative Map. The proposed tentative map identifies 9 lots ranging in size from 22,608 to 73,301 square feet in area. The lots will be accessed via a new private road to be constructed within the subject site and a 20 foot wide access easement. The new private road will be constructed to County private road standards and will include a sidewalk, curbs and gutters. The private road, drainage features and other common areas will be maintained by a homeowners association created for the subdivision.

18,000 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 16 trees and work within the dripline of 30 other trees will be necessary to construct the project. Off-site shoulder improvements will also occur along Gloria Terrace to improve pedestrian safety along this stretch of road.

10. Other Public Agencies Whose Approval is Required (e.g. permits, financing, approval or participation agreement): Building Inspection Division, Consolidated Fire Department, East Bay Municipal Utilities District, Central Contra Costa Sanitary District, and Public Works Department.

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 & Forest Resources | <input checked="" type="checkbox"/> Air Quality     |
| <input checked="" type="checkbox"/> Biological Resources    | <input checked="" type="checkbox"/> Cultural Resources  | <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/Traffic             | <input type="checkbox"/> Utilities & Service Systems    |                                                     |
| <input type="checkbox"/> Mandatory Findings of Significance |                                                         |                                                     |
| <input type="checkbox"/> None of the above                  |                                                         |                                                     |

DETERMINATION

On the basis of this Initial Study:

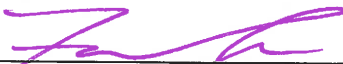
I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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 significant effect(s) 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, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." 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, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

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

9/21/16  
\_\_\_\_\_  
Date

## SOURCES

In the process of preparing the Initial Study Checklist and conducting the evaluation, the following references, which are available for review either online or at the Contra Costa County Department of Conservation & Development, 30 Muir Road, Martinez, were consulted:

1. Application received by Contra Costa County on February 17, 2016
2. Revised Vesting Tentative Map date stamped June 16, 2016.
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, 2015, and CEQA Guidelines amended as of May 2011
12. Bay Area Air Quality Management District CEQA Guidelines dated May 2011.
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. Arborist report prepared by Timothy C. Ghirardelli, dated February 4, 2016
19. Biological Resource Analysis prepared by Monk & Associates, Inc., dated May 9, 2016
20. Storm Water Control Plan, prepared by Humann Company, Inc., dated February 2016
21. Contra Costa County Code – Title 4 Health and Safety
22. 2015 Contra Costa Congestion Management Report
23. Gloria Terrace Shoulder Improvement Plan, dated June 16, 2016

**EVALUATION OF ENVIRONMENTAL IMPACTS**

**I. AESTHETICS – Would the project:**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	_____	✓	_____	_____
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	_____	✓	_____	_____
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	_____	_____	✓	_____
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	_____	✓	_____	_____

**Impact: Less Than Significant With Mitigation Incorporated**

a) The project site is currently undeveloped and is covered with a variety of vegetation types, including numerous trees. Much of the site consists of steep hillsides with elevations ranging from 300 feet above mean sea level (msl) to 461 feet above msl. The upper portion of the property straddles a ridgeline and the lower portion of the site consists of an east/west linear valley. The 2005 – 2020 County General Plan does not identify the site as being a within a designated scenic ridgeline or within a designated scenic area. Nevertheless, new homes will be visible to adjacent neighbors and properties within the general vicinity. Lots 1 – 4 are at significantly lower elevations compared to many adjacent properties therefore, will not be visible from a variety of vantage points. Lots 5, 6, 7, 8 and 9 are at higher elevations and will be more visible. To compensate for the added height of these new residences, the applicant has proposed a subdivision design which lowers the highest topographical elevation (buildable area) of 457 to 440 feet. This approach along with limited building home heights (AES-2 below) will essentially maintain current lines-of-site as seen from neighboring properties. An architect’s rendition of the completed subdivision confirms that with appropriate grading and specific residential height limits, construction of the subdivision will not significantly affect the visual quality of the area.

While homes being built on lots 5, 7, 8 and 9 will be of a stepped down design (appearing as a single-story residence from the frontage), the residence to be built on lot 6 will be of a more conventional type (2-story). This is necessary due to the fact that lot 6 is located on the northern portion of the property where the topography continues to elevate. To compensate for this rise in elevation, the building pad for lot 6 will also be graded down from 453 to 437 feet and “tucked” into the hillside. This approach along with a 28-foot building height limit (AES-2 below) on lot 6 will significantly maintain visual corridors in this specific area. Despite the project’s grading and height limits, the following mitigation measures will further reduce the potential aesthetic impacts and ensure the project will represent a less than significant impact on the visual quality of the site and area in general.



**AES-1:** 30 days prior to applying for building permits for each new residence, the applicant/property owner shall submit for review and approval of Department of Conservation and Development, Current Planning Division (CDD) staff construction drawings (e.g., site plan, floor plans, elevations and grading plans) to verify compliance with all mitigations and conditions of approval.

**AES-2:** Prior to recordation the final map, the applicant shall submit for the review and approval of CDD staff a proposed deed restriction to be recorded concurrently with the approved final map that shall apply to future development of the subdivision with the following design standards:

- Residential buildings on lots 5, 7, 8 and 9 shall not exceed 18 feet in height above the 440 foot elevation level. Overall heights within stepped down portions of residences may exceed 18 feet but not more than 35 feet in height.
- Residential buildings on lots 5, 7, 8 and 9 shall be of a split level design to reduce effective visual bulk.
- Residential buildings on lot 6 shall not exceed 28 feet in height above the 437 foot elevation level.
- Terracing of buildings and retaining walls shall be parallel with slopes.
- Large expanses of any material in a single plane shall be avoided. On downhill elevations, building mass shall be broken up with horizontal and vertical elements.
- Cantilevering of buildings or decks on downhill slopes shall be avoided.
- Open or enclosed crawl spaces exceeding 6 feet in height at exterior walls of buildings are not allowed.
- Exposed retaining walls over 6 feet in height in a uniform plane shall be avoided. Terraced retaining walls shall be utilized whenever feasible.
- 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.

- b) As mentioned above, the project will not have any effects on County designated scenic vistas. Nevertheless, mitigation measures have been identified that will further reduce the potential for significantly changing the visual characteristics of the site. With regards to tree resources, the project proposal includes the removal of 16 out of site's 83 trees. The trees chosen for preservation offer the greatest natural value with respect to tree health and those well suited to enhancing natural screening between properties. Although certain trees are required to be removed due to the installation of necessary subdivision infrastructure, such as roadways, building pads and drainage improvements, tree resources on-site and in the general area will not be substantially depleted as a result of the project.

Although not scheduled for removal, work within the dripline of 30 other trees has been identified as necessary to construct the project. As a result, the project applicant has commissioned Timothy Ghirardelli, a certified arborist, to prepare a report detailing protective measures specifically aimed at preserving the health of those trees to be saved. The report dated February 4, 2016, includes Protection Guidelines for all phases of the project. Mitigation AES-3 below requires the applicant to adhere to those recommendations throughout the project. No significant rock outcroppings, historic buildings or scenic highways are within the project area. Therefore, given the mitigations incorporated into the project, there will be no substantial impacts to tree resources, historic structures or rock outcroppings as a result of the proposed project.

**AES-3:** The applicant shall adhere to all of the recommended tree preservation measures outlined within the arborist report prepared by Timothy Ghirardelli, dated February 4, 2016. Compliance with the recommended tree protection measures shall be documented and provided to CDD staff in report form for review within 30-days of completion of the construction activities. All recommended tree protection measures shall be placed on the face of construction plans.

- c) The subject 9-lot subdivision is considered an in-fill project. The vast majority of properties in the general area have been developed with single family homes and the normally associated infrastructure such as roads, drainage and other utilities. As proposed, the residential density of the project is consistent with the General Plan designation of Single-Family Low Density, as well as, with the R-20 Single-Family Residential District development standards. Therefore the intensity of the development is appropriate for the site and consistent with the neighboring properties. Nevertheless, the applicant has put forth a design that retains certain trees that because of their location, age and overall health will aid in maintaining the site's visual characteristics as well as provide visual buffering between new and existing residences. Additionally, particular attention has been given to preserving visual corridors currently afforded to existing neighborhood homes. This has been achieved by proposing to grade the site's ridgeline down from 457 to 440 feet. This approach does not require new residential buildings to substantially protrude above current elevations of the site. Additionally, the project design includes locating new residences as far as possible away from existing residences. These design features will soften the visual intrusion of new homes to an area where there were none previously. Therefore, given that the proposal is an in-fill project and incorporates numerous design features aimed at limiting visual obtrusiveness, the project will not have a significant effect on the aesthetic quality of the site and area in general.
- d) The project will create new sources of glare and light predominantly during the dusk and night hours of any given day as a result of the proposed new buildings, surface parking and/or other improvements on site. This type of alteration of visual character is consistent with the surrounding properties and would be a less than significant impact, subject to adherence with the mitigation measure below.

**AES-4:** 30-days prior to applying for a residential building permit, the applicant shall submit for review and approval of CDD staff a lighting plan. Light standards shall be low-lying and exterior lights on the buildings shall be deflected so that lights shine onto individual lots and not toward adjacent properties; all subject to review and approval by CDD staff prior to issuance of a residential building permit.

**II. AGRICULTURE & FOREST RESOURCES** – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agricultural and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection and state’s inventory of forest land, including the Forest and Range Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	_____	_____	_____	_____ ✓
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	_____	_____	_____	_____ ✓
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)?	_____	_____	_____	_____ ✓
d. Result in the loss of forest land or conversion of forest land to non-forest use?	_____	_____	_____	_____ ✓
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?	_____	_____	_____	_____ ✓

**Impact: No Impact**

a-e) According to the California Department of Conservation, the project site is designated as Urban and Built-Up Land and does not contain Prime Farmland, Unique Farmland, or Farmlands of Statewide Importance. The project site is not under a Williamson Act contract or zoned for any other agricultural or open space use. In regards to forestry resources, the site is not zoned Timberland, nor does it boarder forest lands which many be impacted by the project.

III. **AIR QUALITY** – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	_____	_____	✓	_____
b. Violate any air quality standard or contribute to an existing or projected air quality violation?	_____	✓	_____	_____
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	_____	_____	✓	_____
d. Expose sensitive receptors to substantial pollutant concentrations?	_____	_____	✓	_____
e. Create objectionable odors affecting a substantial number of people?	_____	_____	_____	✓

**Impact: Less Than Significant Impact with Mitigation**

a) The air quality plan applicable to the project area is the Bay Area Air Quality Management District’s (BAAQMD) Bay Area 2010 Clean Air Plan (Clean Air Plan), which was adopted on September 15, 2010.<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. An evaluation of the project’s consistency with each of these criteria is provided below. As described, the proposed project would not conflict with or obstruct implementation of the Clean Air Plan and this impact would be less than significant with the implementation of Best Management Practices.

*Clean Air Plan Goals.* The primary goals of the Clean Air Plan are to: attain air quality standards; reduce population exposure to air pollutants and protect public health in the Bay Area; and reduce greenhouse gas emissions and protect the climate. As indicated in the analysis that follows below, the proposed project would not exceed the BAAQMD’s significance criteria for air pollutants or greenhouse gas emissions and would not increase exposure of the population to air pollutants. The proposed project would not hinder the region

<sup>1</sup> Bay Area Air Quality Management District, 2010. *Bay Area 2010 Clean Air Plan*. September 15.

from attainment of the goals outlined in the Clean Air Plan. Therefore, the project supports the goals of the Clean Air Plan.

*Clean Air Plan Control Measures.* The BAAQMD identifies control measures as part of the Clean Air Plan to reduce ozone precursor emissions from stationary, area, mobile, and transportation sources. The transportation control measures are designed to reduce emissions from motor vehicles by reducing vehicle trips and vehicle miles traveled (VMT) in addition to vehicle idling and traffic congestion. The proposed project would not conflict with the identified transportation and mobile source control measures of the Clean Air Plan.

The Clean Air Plan includes Land Use and Local Impacts Measures (LUMs) that aim to achieve the following: promote mixed-use, compact development to reduce motor vehicle travel and emissions and ensure that planned growth is focused in a way that protects people from exposure to air pollution from stationary and mobile sources of emissions. The LUMs identified by the BAAQMD are not specifically applicable to the proposed project as they relate to actions the BAAQMD will take in the future to reduce impacts from the movement of goods and health risks in affected communities. The LUMs also detail new regulatory actions the BAAQMD will undertake related to land use, including the updated CEQA Air Quality Guidelines and indirect source review, which is still under development by the BAAQMD. However, the project is consistent with the goal of the measures as the project would construct a residential development, would not expose people to air pollution and is an in-fill project and consistent with the vision established in the Clean Air Plan. Thus, the project would not conflict with any of the LUMs of the Clean Air Plan.

The Clean Air Plan also includes Energy and Climate Control Measures (ECM), which are designed to reduce ambient concentrations of criteria pollutants and reduce emissions of CO<sub>2</sub>. Implementation of these measures is intended to promote energy conservation and efficiency in buildings throughout the community, promote renewable forms of energy production, reduce the “urban heat island” effect by increasing reflectivity of roofs and parking lots, and promote the planting of (low-VOC-emitting)<sup>2</sup> trees to reduce biogenic emissions, lower air temperatures, provide shade, and absorb air pollutants. The energy measures of the Clean Air Plan are not specifically applicable to the proposed project. The project would however implement the energy measures as the BAAQMD and local governments (i.e., Contra Costa County) adopt the BAAQMD’s energy measures as regulations in the future. The project would also be consistent with the latest Title 24 standards.<sup>3</sup> For all of these reasons, the proposed project would be consistent with the Clean Air Plan’s energy measures.

*Clean Air Plan Implementation.* The project would develop a residential subdivision on an in-fill site which is consistent with the vision of the Clean Air Plan. Control measures included in the plan include stationary source measures, transportation control measures, mobile source measures, land use and local impact measures, and energy and climate measures. The stationary source measures are not applicable to the proposed project as the measures relate to activities such as metal-melting facilities, open burning, livestock waste, and refineries which are not proposed as part of the project. Therefore, the project would not hinder implementation of these measures. As discussed above, the project would implement

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<sup>2</sup> VOC refers to volatile organic compounds.

<sup>3</sup> Title 24 of the California Code of Regulations, also titled *The Energy Efficiency Standards for Residential and Nonresidential Buildings*, is part of the California Building Standards Code and is regulated by the California Energy Commission. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2013 standards will be effective July 1, 2014.

the applicable transportation, mobile source, land use and local impact, and energy control measures and would not hinder implementation of these measures. Therefore, the proposed project would not hinder or disrupt implementation of any control measures from the Clean Air Plan.

- b) Both State and federal governments have established health-based Ambient Air Quality Standards for six criteria air pollutants: carbon monoxide (CO), ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), lead (Pb), and suspended particulate matter (PM). These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. The Bay Area is under nonattainment status for State 1-hour and 8-hour ozone standards. In addition, the Bay Area was designated as a nonattainment area for the federal 8-hour ozone level. The Bay Area is also considered a nonattainment area for PM<sub>2.5</sub> at the State level and an attainment area at the federal level.

To meet these standards the BAAQMD has established project level thresholds for reactive organic gases (ROG), nitrogen oxides (NO<sub>x</sub>), particulate matter 2.5 (PM<sub>2.5</sub>). ROG is formed from combustion of fuels and evaporation of organic solvents. ROG is an ozone precursor and a prime component of the photochemical reaction that forms ozone. NO<sub>x</sub> refers to the compounds of NO<sub>2</sub>, a reddish-brown gas, and nitric oxide (NO), a colorless, odorless gas, that are formed from fuel combustion under high temperature or pressure. NO<sub>x</sub> is a primary component of the photochemical smog reaction. PM<sub>2.5</sub> refers to fine suspended particulate matter with an aerodynamic diameter of 2.5 microns or less, and particulate matter 10 (PM<sub>10</sub>) which refers to coarse particles that are larger than 2.5 microns but smaller than 10 microns.

According to the BAAQMD's *CEQA Guidelines*, to meet air quality standards for operational-related criteria air pollutant and air precursor impacts, the project must not:

- Generate construction emissions of ROG, NO<sub>x</sub> or PM<sub>2.5</sub> greater than 54 pounds per day or PM<sub>10</sub> exhaust emissions greater than 82 pounds per day;
- Contribute to CO concentrations exceeding the State ambient air quality standards; or
- Generate operation emissions of ROG, NO<sub>x</sub> or PM<sub>2.5</sub> of greater than 10 tons per year or 54 pounds per day or PM<sub>10</sub> emissions greater than 15 tons per year or 82 pounds per day.

Construction and operation emissions associated with the proposed project are analyzed below. As discussed, with implementation of Mitigation Measure AIR-1, the proposed project would not generate construction- or operation-period emissions in excess of established standards and would therefore not violate any air quality standards or contribute substantially to an existing or projected air quality violation.

*Construction Emissions.* During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by excavation, grading, hauling, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO<sub>x</sub>, ROG, directly-emitted particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>), and toxic air contaminants (TACs) such as diesel exhaust particulate matter.

Site preparation and project construction would involve clearing, excavation, grading, and building activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils on the site. If not properly controlled, these activities could temporarily generate PM<sub>10</sub>, PM<sub>2.5</sub>, and small amounts of

CO, SO<sub>2</sub>, and NO<sub>x</sub>. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Given that the project includes a balanced on-site grading plan, the potential for fugitive dust is greatly reduced. PM<sub>10</sub> emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM<sub>10</sub> emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using the California Emissions Estimator Model (CalEEMod) as approved by the BAAQMD. Construction-related emissions are presented in Table 1 and assume total construction duration of 12 months.

The effects of construction activities would be increased dustfall and locally elevated levels of PM<sub>10</sub> downwind of construction activity. Although ROG, NO<sub>x</sub> and exhaust emissions would not exceed the established thresholds as identified in Table 1, the BAAQMD requires the implementation of Construction Best Management Practices to

**Table 1: Project Construction Emissions in Pounds Per Day**

<b>Project Construction</b>	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>Exhaust PM<sub>2.5</sub></b>	<b>Exhaust PM<sub>10</sub></b>
Average Daily Emissions	4.0	18.1	1.1	1.1
BAAQMD Thresholds	54.0	54.0	54.0	82.0
<b>Exceed Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

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.

**Mitigation Measure AIR-1:** Consistent with the Best Management Practices required by the BAAQMD, the following actions shall be incorporated into construction contracts and specifications for the project. All measures shall be printed on the face of construction drawings:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- 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]). Clear signage shall be provided for construction workers at all access points.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- 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.

*Localized CO Impacts.* The BAAQMD has established a screening methodology that provides a conservative indication of whether implementation of a proposed project would result in significant CO emissions. According to the BAAQMD's CEQA Air Quality Guidelines, a proposed project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria are met:

The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, and the regional transportation plan and local congestion management agency plans.

Project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour. The project would also not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, or below-grade roadway). The proposed project would not conflict with the Contra Costa County Transportation Authority's Congestion Management Program for designated roads or highways, a regional transportation plan, or other agency plans. The project site is not located in an area where vertical or horizontal mixing of air is substantially limited. Therefore, the proposed project would not result in localized CO concentrations that exceed State or federal standards.

*Operational Emissions – Regional Emissions Analysis.* In addition to short-term construction emissions, the project would generate long-term operational air emissions. These long-term emissions are primarily mobile source emissions that would result from vehicle trips associated with the proposed project. Area sources, such as natural gas heaters, landscape equipment, and use of consumer products would also result in pollutant emissions. The Contra Costa County Ordinance Code Section 718-10 prohibits the installation of non-EPA certified wood burning appliances. The CalEEMod emissions analysis reflects this ordinance. CalEEMod was also used to calculate the long-term mobile emissions which are reflected in Table 2 below.

The primary emissions associated with the project are regional in nature, meaning that air pollutants are rapidly dispersed on emission or, in the case of vehicle emissions associated with the project, emissions are released in other areas of the Air Basin. The daily emissions associated with project operational trip generation and area sources are identified in Table 2 for ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The results indicate that project emissions would not exceed the significance thresholds for maximum daily emissions; therefore, the proposed project would not have a significant effect on regional air quality.



**Table 2: Project Regional Emissions**

<b>Emission Category</b>	<b>Reactive Organic Gases (ROG)</b>	<b>Nitrogen Oxides (NO<sub>x</sub>)</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
<b>Emissions in Pounds Per Day</b>				
Area Source Emissions	0.6	0.02	0.02	0.02
Energy Source	.02	0.06	0.02	0.02
Mobile Source Emissions	3.0	0.6	0.6	0.2
<b>Total Emissions</b>	<b>3.6</b>	<b>0.7</b>	<b>0.6</b>	<b>0.2</b>
<b>BAAQMD Significance Threshold</b>	<b>54.0</b>	<b>54.0</b>	<b>82.0</b>	<b>54.0</b>
<b>Exceed?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Emissions in Tons Per Year</b>				
Area Source Emissions	0.1	0.004	0.004	0.004
Energy Source	0.003	0.01	0.003	0.003
Mobile Source Emissions	0.5	0.1	0.07	0.02
<b>Total Emissions</b>	<b>0.6</b>	<b>0.1</b>	<b>0.1</b>	<b>0.03</b>
<b>BAAQMD Significance Threshold</b>	<b>10.0</b>	<b>10.0</b>	<b>15.0</b>	<b>10.0</b>
<b>Exceed?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

- c) CEQA defines a cumulative impact as two or more individual effects, which when considered together, are considerable or which compound or increase other environmental impacts. According to the BAAQMD, air pollution is largely a cumulative impact and no single project is sufficient in size to itself result in nonattainment of ambient air quality standards. In developing the thresholds of significance for air pollutants used in the analysis above, the BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. The BAAQMD *CEQA Air Quality Guidelines*<sup>4</sup> indicate that if a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, if a project's daily average or annual emissions of operational-related criteria air pollutants exceed any applicable threshold established by the BAAQMD, the proposed project would result in a cumulatively significant impact.

As shown in Table 2 above, implementation of the proposed project would generate regional emissions that do not exceed established thresholds. Therefore, the project would not make a cumulatively considerable contribution to regional air quality impacts.

- d) Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers. Individuals particularly vulnerable to diesel particulate matter (DPM) are children, whose lung tissue is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to DPM. Exposure from diesel exhaust associated with construction activity contributes to both cancer and chronic non-cancer health risks.

<sup>4</sup> Bay Area Air Quality Management District, 2012. *California Environmental Quality Act, Air Quality Guidelines*. May.

This section describes the potential impact on sensitive receptors from construction and operation of the proposed project.

*Project Construction – Toxic Air Contaminants.* During construction, various diesel-powered vehicles and equipment would be in use. In 1998, the California Air Resources Board (ARB) identified particulate matter from diesel-fueled engines as a toxic air contaminant (TAC). The ARB has completed a risk management process that identifies potential cancer risks for a range of activities using diesel-fueled engines.<sup>5</sup> High volume freeways, stationary diesel engines and facilities attracting heavy and constant diesel vehicle traffic (e.g., distribution centers and truck stops) were identified as having the highest associated risk.

Health risks from TACs are a function of both concentration and duration of exposure. Unlike the above types of sources, construction diesel emissions are temporary, affecting an area for a period of days or perhaps weeks. Additionally, construction-related sources are mobile and transient in nature, and the emissions occur within the project site. Given the short duration of project construction, the construction of the project would not expose sensitive receptors to substantial pollutant concentrations. Additionally, with implementation of Mitigation Measure AIR-1, which is consistent with BAAQMD guidelines, health risks from construction emissions of diesel particulate would be less than significant.

*Project Operation – Toxic Air Contaminants.* Once operational, the project would include residential uses which would not be a source of toxic air contaminants; however future residents of the site would be considered sensitive receptors. The ARB recommends avoiding the siting of new sensitive land uses within 500 feet of a freeway.<sup>6</sup> Sources of TACs that could impact future residents would include diesel emissions from highways or to a lesser extent, railroad tracks. No railroad is located within the general vicinity and the project site is located more than 9,000 feet from the closest highway/Interstate (I-680). According to the ARB, at this distance, these sources would not substantially impact the project site.

Additionally, the BAAQMD issues permits to businesses whose operation includes the release of toxic air contaminants. These operations are known as stationary air pollution sources. The project was evaluated to determine the potential impact of these stationary air pollution sources on the proposed project. In order to identify stationary sources for a particular location, the BAAQMD provides KML (Google Earth) files for each county within their jurisdiction. Using the KML file for Contra Costa County and a 1,000-foot buffer zone, no stationary sources were identified within the vicinity of the project site. Therefore, development of the project would not expose future residents of the project site to substantial pollutant concentrations.

- e) The project does not include any activities or operations that would generate objectionable odors. The project is not located in an area with confirmed odor complaints and once operational, the project would not be a source of odors. Therefore, the project would not create objectionable odors affecting a substantial number of people.

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<sup>5</sup> California Air Resources Board, 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October.

<sup>6</sup> ARB, 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. April.

**IV. BIOLOGICAL RESOURCES – Would the project:**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Dept. of Fish and Game or U.S. Fish & Wildlife Service?	_____	_____ ✓ _____	_____	_____
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 Dept. of Fish and Game or U.S. Fish & Wildlife Service?	_____	_____	_____ ✓ _____	_____
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	_____	_____	_____	_____ ✓ _____
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 native wildlife nursery sites?	_____	_____	_____	_____ ✓ _____
e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?	_____	_____	_____ ✓ _____	_____
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?	_____	_____	_____	_____ ✓ _____

**Impact: Less Than Significant With Mitigation Incorporated**

a - b) The site is currently vacant and is essentially surrounded by dense urban development and residential communities. According to the 2005-2020 Contra Costa County General Plan, the site is not within an identified “Significant Ecological Resource Area”. A Biological Resource Analysis (Report), dated May 5, 2016, was prepared by Monk & Associates, Inc. As part of the Report, Monk & Associates researched the most recent version of the California Department of Fish and Wildlife’s Natural Diversity Database, RareFind 3.2 application for historic and recent records of special-status plant and animal species known to occur in the region of the project site. Monk & Associates also searched the 2015 electronic version of the California Native Plant Society’s “Inventory of Rare and Endangered Plants of California” for records of special-status plants known in the region of the project site.

According to the Report, Monk & Associates examined all known record locations for special-status species to determine if special-status species could occur on the project site or within an area of effect.

Additionally, Monk & Associates biologists conducted special-status plant surveys on August 24, 2015, and in March and May of 2016. The report indicates the vegetation at this location is dominated by non-native annual grassland with scattered trees and shrubs. The trees onsite do not comprise a woodland community due to their sparse and scattered occurrence on the site. No special-status plant species were identified onsite. The non-native annual grassland community is the only plant community onsite.

According to the Report, the proposed project would not interfere with the movement of native wildlife. The project site is essentially surrounded by development, effectively isolating the project site from long distance wildlife movements. Several wildlife trails bisect the site, these trails were likely created by urban-adapted mammals (neighborhood cats, raccoons, skunks, coyotes) moving through the project site from one urban setting to another. The project site has limited connectivity to surrounding undisturbed or regional wildlife corridors. As this project is an urban infill development, development of this site would not impact wildlife movement.

The project does include the removal 16 trees and work within the dripline of 30 other trees. Although no evidence was observed onsite that special status birds (e.g., bats, raptors nesting birds) were utilizing the trees onsite, Mitigation Measures BIO-1, BIO-2, and BIO-3 when implemented will ensure that potential impacts to wildlife species would be reduced to less than significant levels.

**BIO-1:** In order to avoid impacts to special-status bats, a biologist shall survey all trees onsite (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:** To ensure that impacts to nesting raptors are avoided or offset, the following mitigation measures will be implemented:

a. In order to avoid impacts to nesting raptors, nesting surveys shall be conducted by a qualified raptor biologist prior to commencing with earth-moving or construction work, if this work would commence between February 1<sup>st</sup> and August 31<sup>st</sup>. The raptor nesting surveys

shall include examination of all trees within 200 feet of the project site not just trees slated for removal.

b. If nesting raptors are identified during the surveys, the dripline of the nest tree must be fenced with orange construction fencing (provided the tree is on the project site), and a 200-foot radius around the nest tree must be staked with orange construction fencing. If the tree is located off the project site, then the buffer shall be demarcated per above where the buffer occurs on the project site. The size of the buffer may be altered if a qualified raptor biologist conducts behavioral observations and determines the nesting raptor are well acclimated to disturbance. If this occurs, the raptor biologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting raptors. No construction or earth-moving activity shall occur within the established buffer until it is determined by a qualified raptor biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by August 1<sup>st</sup>. This date may be earlier or later, and would have to be determined by a qualified raptor biologist. If a qualified biologist is not hired to watch the nesting raptors then the buffers shall be maintained in place through the month of August and work within the buffer can commence on September 1<sup>st</sup>.

c. Two surveys may be required to address both early and later nesting raptor species. Great horned owls and American kestrels begin nesting in February while red-tailed hawks and red-shouldered hawks begin nesting in early April. Thus, an early survey should be conducted in February if earth-moving work or construction is proposed to commence between February 1<sup>st</sup> and April 1<sup>st</sup>. If construction has not commenced by the end of March, a second nesting survey shall be conducted in April/May, commence after May but before September 1<sup>st</sup>, then the second survey shall be conducted within the 30-day period prior to site disturbance.

d. If the early nesting survey identifies a large stick nest or other type of raptor nest that appears inactive at the time of the survey, but there are territorial raptors evident in the nest site vicinity, a protection buffer (as described above) shall be established around the potential nesting tree until the qualified raptor biologist determines that the nest is not being used. In the absence of conclusive observations indicating the nest site is not being used, the buffer shall remain in place until a second follow-up nesting survey can be conducted to determine the status of the nest and eliminate the possibility that the nest is utilized by a late-spring nesting raptor (for example, red-tailed hawk). This second survey shall be conducted even if construction has commenced. If during the follow-up late season nesting survey a nesting raptor is identified utilizing the nest, the protection buffer shall remain until it is determined by a qualified raptor biologist that the young have fledged and have attained sufficient flight skills to avoid project construction zones. If the nest remains inactive, the protection buffer can be removed and construction and earth-moving activities can proceed unrestrained.

**BIO-3:** A nesting 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 1. 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.

- c) There are no areas on the project site that would be subject to the Corps jurisdiction. No wetlands, vernal pools or waters of the United States or State have been observed on the project site. Therefore, no impact is expected on wetlands.
- d-f) The proposed project would not interfere with migratory fish as the project site does not contain any wetlands or navigable waterways. Nor will the project result in permanent disruption to movement of wildlife species. The project site is not located on or near a wildlife nursery site and would therefore have no impact. The project as proposed will require the removal of 16 trees and work within the dripline of 30 other trees. Recommendations to protect the trees have been provided by a certified arborist. The recommendations have also been incorporated into the project as mitigation measure AES-3. Therefore, the project will result in a less than significant impact to any potential wildlife or tree resources.

V. **CULTURAL RESOURCES** – Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	_____	_____	_____	_____ ✓
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	_____	_____ ✓	_____	_____
c. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	_____	_____	_____ ✓	_____
d. Disturb any human remains, including those interred outside of formal cemeteries?	_____	_____ ✓	_____	_____

**Impact: Less Than Significant With Mitigation Incorporated**

- a) The project consists of constructing a 9-lot subdivision within a vacant 7.5 acre property. A copy of this application was forwarded to the California Historic Resources Information System (CHRIS) as part of this project and pervious applications submitted for development on this site. CHIS stated that there is a low possibility of historical resources on this site. Additionally, in order to implement the project, no removal of structures, buildings or any other type of infrastructure is necessary. Therefore no historical resources as defined by Section 15064.5 will be impacted by the proposal.
- b-d) There are no records of existing archaeological or paleontological resources existing at the site to date, and no records were found indicating that prior studies for those types of resources have been completed. The proposed development is considered an infill project. Nevertheless, the following mitigation measure will address any unexpected discovery or find which may occur during the construction phase of the project.

**CUL-1:** Stop work and conduct an evaluation of accidental discovery of human remains or find.

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined whether or not the remains are subject to the coroner's authority.

If human remains are encountered, work shall halt within 50-feet of the find and the County Coroner notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendent to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. All work shall be postponed until a qualified archaeologist has had an opportunity to evaluate any potential find.

**VI. GEOLOGY AND SOILS – Would the project:**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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? Refer to Division of Mines and Geology Special Publication 42.	_____	_____ ✓ _____	_____	_____
2. Strong seismic ground shaking?	_____	_____	_____ ✓ _____	_____
3. Seismic-related ground failure, including liquefaction?	_____	_____	_____ ✓ _____	_____
4. Landslides?	_____	_____	_____	_____ ✓ _____
b. Result in substantial soil erosion or the loss of topsoil?	_____	_____	_____ ✓ _____	_____
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	_____	_____	_____ ✓ _____	_____

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1998), creating substantial risks to life or property?		✓		
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems where sewers are not available for the disposal of wastewater?				✓

**Impact: Less Than Significant with Mitigation Incorporated**

a-b) GFK & Associates, Inc. (GFK) has conducted a preliminary geologic investigation for the proposed subdivision and has detailed their findings and recommendations in a report dated February 4, 2016. According to the report, the site is in the outcrop belt of the Martinez Formation of Paleocene Age. This geologic unit is described as consisting of interbedded sandstone, clay shale, siltstone and clayey sandstone that has been tightly folded, faulted and uplifted. GFK provides a brief overview of the location of known active faults near to the site and their potential to trigger significant ground shaking. The nearest active fault is the Concord-Green Valley fault (located 4 miles northeast of the site). Given that proposed residences and other improvements will be designed and built in accordance with the most recent California Building Code, it is assumed that any potential risks associated with ground shaking will be diminished to less than significant levels.

The report also presents the landslide mapping of the U.S. Geological Survey (Nilsen, 1975) and California Geological Survey (Haydon, 1995). Both of these maps confirmed the presence of landslides within the vicinity of the project site but not on the property itself. GFK field observations and test data also conclude that no landslides are present at the subject location. There is however, isolated creeping of soil on the steep slopes of lots 5 and 9. According to test pit data, this creeping soil is only about 1-foot thick, and underlined with bedrock composed of hard, fractured sandstone and does not constitute a “landslide”. Nevertheless, the GFK report provides specific lot-by-lot recommendations for development. These recommendations relate to the design of drainage, grading, erosion control and foundations. The report and its findings has been peer reviewed by the County Geologist and found to provide sufficient information to justify the report’s conclusions. GEO-1 requires that the recommendations of the report be followed during the final design phases of the project. Furthermore, GEO-2 requires that concurrently with the recordation of the maps for this subdivision, a deed disclosure shall be recorded alerting any prospective buyers to the GFK report and physical implications of developing on the subject site. Notwithstanding GEO-1 and GEO-2, in an abundance of caution, the County Geologist has provided additional recommendations (GEO-3), which when implemented will further reduce any potential geological related risks to less than significant levels.

**GEO-1:** The applicant shall comply with specific standards and criteria for use in design and construction of the project (site grading, drainage and foundation design) as identified in the February 4, 2016, GFK & Associates, Inc. preliminary geologic investigation.

**GEO-2:** Concurrently with recordation of the Parcel Map, record a statement to run with deeds to the property acknowledging the GFK & Associates 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-3:**

1. At least 45 days prior to requesting a building permit, the project proponent shall submit a geology, soil, and foundation report for review by the Peer Review Geologist, and review and approval by CDD staff. Improvement, grading, and building plans shall carry out the recommendations of the approved report. This report shall include the following: California Building Code seismic parameters that are based on the prevailing code; site specific data on the orientation of bedding; evaluation of the design of water quality basin(s) and their locations with respect to planned improvements; evaluation of the potential for slope creep to adversely affect planned improvements; provide recommendations that address monitoring clearing and backfilling depressions created by removal of tree trunks and their major roots; evaluate grading plan with respect for the potential for seismic settlement and seismically-induced ground failure by recognized methods appropriate to soil conditions discovered during subsurface investigation; characterize the expansivity of the soils and bedrock on the site and provide measures to avoid/control damage to minimize expansive soil effects on structures. The report should also identify recommended geotechnical monitoring services during grading and foundation-related work and provide a corrective grading plan for the two soil creep areas, and address removal of undocumented fill.

2. During grading, the geotechnical engineer shall observe and approve any keyway excavations deemed necessary; removal of any existing fill materials down to stable bedrock or in-place material; and installation of all subdrains including their connections. All fill slope construction shall be observed and tested by the project geotechnical engineer, and the density test results and reports submitted to the County to be kept on file. Cut slopes and any keyways shall be periodically observed and mapped by the project geotechnical engineer/engineering geologist who will provide any required slope modification recommendations based on the actual geologic conditions encountered during grading. Written approval from the Contra Costa County Building Inspection Division shall be obtained prior to any modification.

3. Prior to issuance of residential building permits, the applicant shall submit a geotechnical monitoring and testing report. That report shall include evidence of testing and observation services performed during rough grading, including (i) a map showing the as graded cut/fill contact, along with geologic mapping of all bedrock cut slopes and cut pad areas, and (ii) results of all compaction test data gathered during grading.

4. Prior to requesting a final building inspection for a new residence, submit a geotechnical letter-report documenting inspections made by the project geotechnical engineer during foundation-related work and final grading, and provide the geotechnical engineer's opinion of the consistency of the as-built improvements with recommendations in the approved geotechnical report.

5. Grading, improvement, erosion control and building plans shall employ, as appropriate, the following surface drainage measures: (i) positive grading of building pads for removal of surface water from foundation areas; (ii) collection of downspout water from roof gutters; (iii) avoidance of planted areas immediately adjacent to structures; (iv) avoidance of sprinkler

systems (as opposed to drip irrigation systems) in the immediate vicinity of foundations; (v) grading of slopes to control erosion from over-the-bank runoff; and (vi) re-vegetation of permanent slopes. Interim protective measures for runoff shall be followed during the construction phases when slopes are most susceptible to erosion. The final design shall incorporate drainage measures, including the installation of subsurface drains, where recommended by the project geotechnical engineer.

6. Geologic/Geotechnical reports and Grading/Drainage/Foundation shall be subject to review by the Peer Review Geologist and approval by CDD staff.

- c) The Safety Element of the General Plan divides Contra Costa County into three liquefaction potential categories: “generally high,” “generally moderate to low,” and “generally low.” According to this map, the parcel is in the “generally low” susceptibility category. Although rigorous evaluation of liquefaction potential in areas of “high potential,” and less comprehensive investigations are demanded in the “moderate to low” category. Evaluation of liquefaction potential is not required for sites in the “generally low” category.
- d) In 1995 the US Geological Survey issued a professional paper that characterizes the composition and engineering properties of rock and soils that most influence slope stability. According to that report, the formation mapped on the site (Unit #426) is the Martinez Formation, lower glauconitic sandstone member. It consists of about 50 percent sandstone and conglomerate, and 50 percent clayey rock. Per the GFK report, the fine-grained rocks consist of a) mudstone, b) siltstone (some tuffaceous), c) fine-grained, clay-saturated sandstone, and d) shale. Much of the bedrock is rated severely expansive, and the soils and colluvial deposits are severely expansive. The County Building Inspection Division will require that the proposed subdivision is engineered according to building code standards. The engineering of the proposed structures pursuant to the applicable building code will ensure that any risks to life or property are reduced to a less than significant level.
- e) There is no potential for impacts regarding the soil’s inability to support a waste disposal system as the project site is served by Central Contra Costa Sanitary District (District). District comments in response to the project proposal confirms that their system has capacity to adequately serve the project.

**VII. GREENHOUSE GAS EMISSIONS – Would the project:**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	_____	_____	✓	_____
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	_____	_____	✓	_____

**Impact: Less Than Significant Impact**

- a-b) According to the Contra Costa County’s Greenhouse Gas Emissions Inventory, energy consumption by commercial/industrial/direct access land uses in the unincorporated area account for 73% of the metric tons of carbon dioxide equivalent (MTCO2e) for all portions of the County. However, it is noted that the high percentage of emissions related to commercial/industrial/direct access uses in the unincorporated area of the County is a result of natural gas use in the County’s refineries. The proposed subdivision will produce minor amounts of greenhouse gases due to the operation of construction equipment and automobiles of new residences. However, as described in the Air Quality section above, due to the size and scope of the proposed project, any impacts to the amount of greenhouse gas emissions in the County would be negligible. There may be some increase in greenhouse gases as a result of the project, but they would be considered less than significant due to the temporary nature of construction and limited number of new vehicles to the area as a result of the project.

**VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	_____	_____	✓	_____
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?	_____	_____	✓	_____
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?	_____	_____	_____	✓
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65862.5 and, as a result, would it create a significant hazard to the public or the environment?	_____	_____	_____	✓
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 for people residing or working in the project area?	_____	_____	_____	✓
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	_____	_____	_____	✓

- g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- h. Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?

			✓
		✓	

**Impact: Less Than Significant Impact**

- a) Hazardous conditions resulting from site grading, excavation, and construction of residential units and supporting infrastructure would be related to potential for an explosion or the release of hazardous substances (including, but not limited to oil, pesticides, or chemicals) in the event of an accident at or adjacent to the project site, or damage from an earthquake. Once built, the residential structures and access road will not involve the use of any hazardous materials. However, during construction, some hazardous materials may be used. Material common to construction, such as fuels and petroleum products, or herbicides are usually in such small amounts that clean up, and disposal of potentially hazardous material will be managed according to standard procedures to protect air quality, water quality, and the environment as per state law.
- b) According to all available material there are no storage tanks, no odors indicative of hazardous material or petroleum products, no pools of potentially hazardous liquids, no stained soil, and no drums containing chemical or hazardous materials on the project site. In addition, based on the project site’s residential zoning, there is no documentation or evidence of soil or groundwater pollutants associated with the overall use of the property. Lastly, according to all available maps, there are no hazardous material sites in the vicinity.
- c) The project site is outside a ¼ mile radius of the nearest school. Nevertheless, the project includes residential uses and is completely surrounded by other residential developments. The residential uses proposed for the project site would not emit hazardous emissions or result in the storage or handling of hazardous materials, substances or waste.
- d) A review of regulatory databases maintained by Contra Costa County, the State of California, and federal agencies found no documentation of hazardous materials violations or discharge on the property. The project site has no Recognized Environmental Concerns (RECs).
- e-f) The subject property is not located within an airport land use plan area.
- g) 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 proposed project does not propose to remove or alter any existing structures that may be an element of any existing emergency response or evacuation plans. Lastly, the proposed subdivision will not negatively impact any communications methods that may be used during an emergency situation.
- h) The proposed project is strictly intended for residential uses, and will not expose people or structures to any additional risks involving wildfires.

**IX. HYDROLOGY AND WATER QUALITY – Would the project:**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?	_____	_____	_____	_____ ✓
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	_____	_____	_____	_____ ✓
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	_____	_____	_____	_____ ✓
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface run-off in a manner that would result in flooding on- or off-site?	_____	_____	_____ ✓	_____
e. Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	_____	_____	_____	_____ ✓
f. Otherwise substantially degrade water quality?	_____	_____	_____	_____ ✓
g. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	_____	_____	_____	_____ ✓
h. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	_____	_____	_____	_____ ✓
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	_____	_____	_____	_____ ✓
j. Be subject to inundation by seiche, tsunami or mudflow?	_____	_____	_____	_____ ✓

**Impact: Less Than Significant Impact**

- a-b) In the San Francisco Bay Region, the Regional Water Quality Control Board (RWQCB) includes permit requirements for stormwater runoff under the National Pollution Discharge Elimination System (NPDES) program. The RWQCB regulates stormwater runoff from construction activities under the NPDES permit from the State Water Resources Control Board (SWRCB). The Contra Costa County Clean Water Program administers the stormwater program for a project after it is constructed.

The project applicant has prepared a Stormwater Control Plan that includes specifications for Best Management Practices (BMPs) to be implemented before, during and after project construction to control surface discharge and pollutants. The primary BMP would incorporate grassy swales into the project design. These swales are components of an overall project stormwater control system that includes sub drains, area drains, driveway culverts, and underground structures. Swales are designed to collect runoff and filter water through a layer of soil. Routine maintenance on the swales will generally involve maintaining unobstructed flow in the swale, preventing and repairing any erosion in the swale, and maintaining healthy vegetation in the swale. Typical routine maintenance will involve the following activities:

- Inspecting swales for erosion and exposure of soils, removal of accumulated sediment, and repair of exposed areas;
- Periodic inspection of subdrain pipes and driveway culverts beneath the swales for evidence of sediment or flow obstructions;
- Inspection and monitoring of soil at the bottom of the swale to maintain uniform percolation. If areas of the swales are not percolating within 48-hours after a storm, the soil would be tilled and replanted;
- Periodic examination of vegetation to ensure that it is healthy and dense enough to provide the required filtration and to prevent soil erosion within the swale. Mulch should be replenished, and any fallen leaves or debris should be removed from the swale. Routine maintenance will also include mowing the vegetation, which should be limited to removing no more than 1/3 of the height of grasses. Irrigation would be performed so as not to be excessive, but to maintain healthy vegetation; and
- As part of vector control activities, any holes in the swale, or areas where water could pond for more than 48-hours, would be promptly backfilled or repaired. If any mosquito larvae are present and persistent, the Contra Costa Mosquito and Vector Control District would be contacted for information and advice. The use of larvicide and other pesticides would be kept to an absolute minimum and applied only when necessary by a licensed individual or contractor.

The selection, sizing, and preliminary design of the water treatment BMPs identified in the Stormwater Control Plan for Gloria Terrace Estates meets the requirements of the Regional Water Quality Control Board Order R2-2003-22. All stormwater controls have been designed in accordance with Contra Costa County C.3 handbook guidelines. The Gloria Terrace Estates project will not violate the provisions of the County's Clean Water Program.

- c-f) There are no streams or other significant hydrological features on the project site. Proposed drainage improvements will help eliminate localized water ponding by collecting and treating the surface flows from all areas of the project using vegetated swales. All exposed slopes will be stabilized and vegetated. The swales would reduce peak discharge rates, particularly compared to conventional inlet and pipe storm drain systems.
- g) The property is not within a 100-year flood hazard area.
- h) 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, south and east 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. Grassy swales would collect and treat water discharged from impervious surfaces on the developed project site.
- i) The project would not expose people or structures to a significant risk of loss, injury or death involving flooding as a result of the failure of a levee or dam.
- j) 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 western San Francisco Bay. The area of the County from the Carquinez Strait to the east and south show a general decrease in tsunami probability. There have been no recorded occurrences of a seiche wave in this area.

**X. LAND USE AND PLANNING – Would the project:**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	_____	_____	✓	_____
b. Conflict with any applicable land use plan, policy, or the regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	_____	_____	_____	✓
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	_____	_____	_____	✓

**Impact: Less Than Significant Impact**

- a) Development of the proposed project would not physically divide an established community. The proposed project site is located on vacant land within a residential area east of Gloria Terrace.

- b) The project site is zoned R-20 Single-Family Residential District (R-20) and is designated by the County General Plan as Single-Family Residential Low-Density (SL). The proposed additional of 9 residential units represents a less than significant impact in terms of compatibility with the allowed unit density range in the SL designation (1.0 – 2.9 units per net acre).

The County’s Urban Limit Line (ULL) limits potential urban development in the County to 35% of the land in the County, and prohibits the County from designating any land located outside the Urban Limit Line for an urban land use. The project site is located within the boundaries of the County ULL, and thus the additional urban development that may be created as a result of the property’s subdivision is consistent with the intent and purpose of the ULL.

- c) The County has adopted the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP), which provides a framework to protect natural resources in eastern Contra Costa County. This plan covers area within the Cities of Brentwood, Clayton, Oakley, Pittsburg, as well as unincorporated areas of Eastern Contra Costa County. The Gloria Terrace Estates project site is not within the planning boundaries of the HCP/NCCP area. Therefore, the project would not be in conflict with the provisions of the HCP/NCCP to protect biological resources.

**XI. MINERAL RESOURCES** – Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	_____	_____	_____	_____ ✓
b. Result in the loss or availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	_____	_____	_____	_____ ✓

**Impact: No Impact**

- 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 presence of mineral resources.

**XII. NOISE** – Would the project result in:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	_____	_____	_____ ✓	_____



b. Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?			✓	
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		✓		
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 expose people residing or working in the project area to excessive noise levels?				✓
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				✓

**Impact: Less Than Significant Impact with Mitigation**

- a-c) The primary source of noise in the project area is traffic on Gloria Terrace. The noise element of the County General Plan contains the land use compatibility guidelines for community noise. For residences, a noise level of 55-70 dB is conditionally acceptable. Usually the noise levels associated with traffic would be less than 70 dBa, and in the vicinity of the project site is less than 60 dBa, and would not pose significant impacts to residential units adjacent to Gloria Terrace or the surrounding area. Interior noise levels are expected to meet noise ordinance element requirements through standard building construction techniques and noise attenuation designs of windows and doors.
- d) Elevated short-term noise levels would occur during construction. However, standard measures that include restricting construction hours, traffic flow and heavy equipment usage will reduce the noise effects. Incorporation of the following mitigation measures will reduce noise impacts to a less than significant level.

Short-term noise level increases at sensitive locations in and around the area would be expected during periods of heavy construction. Temporary increases in ambient noise levels in the project vicinity are to be expected during the construction phase of the project.

**NOISE-1:** Contractor and/or developer shall comply with the following construction, noise, dust and litter control requirements.

1. The project sponsor shall require their contractor and subcontractors to fit all internal combustion engines with mufflers which are in good condition.
2. A dust and litter control program shall be submitted for the review and approval of the Community Development Division staff. Any violation of the approved program

or applicable ordinances shall require an immediate work stoppage. Construction work shall not be allowed to resume until, if necessary, an appropriate construction bond has been posted.

3. The applicant shall make a good-faith effort to avoid interference with existing neighborhood traffic flow.
4. Prior to issuance of building permits (residences), the proposed roads serving this development shall be constructed to provide access to each lot. This shall include provision for an on-site area in which to park earth moving equipment.
5. Transporting of heavy equipment and trucks shall be limited to weekdays between the hours of 9:00 A.M. and 4:00 P.M. and prohibited on Federal and State Holidays.
6. The site shall be maintained in an orderly fashion. Following the cessation of construction activity, all construction debris shall be removed from the site.
7. All construction activities shall be limited to the hours of 8:00 A.M. to 5:30 P.M., Monday through Friday, and shall be prohibited on state and federal holidays on the calendar dates that these holidays are observed.
8. Prohibit unnecessary idling of internal combustion engines.
9. Locate stationary noise generating equipment as far from surrounding residential properties as possible.

e-f) The project site is not located in the vicinity of an airport or private airstrip.

**XIII. POPULATION AND HOUSING – Would the project:**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	_____	_____	✓	_____
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	_____	_____	_____	✓
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	_____	_____	_____	✓

**Impact: Less Than Significant Impact**

a-c) Population growth in the subject area consists of primarily moderately sized in-fill projects. If each unit of the Gloria Estates Terrace subdivision were to contain 2.74 people (based on January 1, 2005, City and County Population and Housing Estimates, Contra Costa County Community Development Department), the additional 9 residential units would add approximately 25 people to the area. The small increase in local population would not alter the location, distribution, density or growth rate of the projected county population. The project would not displace a substantial number of existing housing or persons residing in the area.

**XIV. PUBLIC SERVICES – Would the project:**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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?				
1. Fire protection?	_____	_____	✓	_____
2. Police protection?	_____	_____	✓	_____
3. Schools?	_____	_____	✓	_____
4. Parks?	_____	_____	✓	_____
5. Other public facilities?	_____	_____	✓	_____

**Impact: Less Than Significant Impact**

- a) The proposed project will proportionately increase the need for fire and police services. The small, incremental increase of 25 people resulting from the addition of 9 units to the Gloria Terrace Estates subdivision would not be expected to substantially affect the ability of fire and police to provide services to the area. Compliance with requirements of the fire district will reduce potential impacts to fire services resulting from the project. Construction of appropriately-sized roadways to all proposed dwelling units will be beneficial to fire protection efforts in the subject area. The proposed drainage improvements associated with the project are beneficial for the long-term maintenance of the drainage facilities in the project vicinity. The proposed project does not significantly increase the need for schools, parks, or other governmental services.

**XV. RECREATION**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	_____	_____	✓	_____
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	_____	_____	✓	_____

**Impact: Less Than Significant Impact**

- a) The deterioration, daily use, and demand for neighborhood parks are largely dependent on the number of people residing in the surrounding area and the frequency in which they utilize the park. As discussed in the Population and Housing Section of this study, the proposed project will not result in a significant population increase in the area. Therefore, any increase in the use of neighborhood or regional parks that results from the proposed project would be less than significant.
- b) Pursuant to the Growth Management Element of the County General Plan, the standard is to have a minimum of 3 acres of neighborhood parks for every 1,000 members of the population. As discussed in the Population and Housing Section of this study, the proposed project will not result in a significant population in the County. The proposed project will not result in a population increase equal to or above 1,000 people, and thus the potential for needing additional recreational facilities to remain in compliance with the General Plan is low. Due to the low demand for new parks as a result of the project, the potential for adverse impacts as a result of new recreational facility construction is less than significant.

Additionally, pursuant to Section 920-4 (Park Dedications) of the County Ordinance, the proposed subdivision would require a park dedication fee be paid when a tentative map is approved. Submittal of a park dedication fee would be required prior to issuance of building permits for each new dwelling unit. Given that the project is of a relatively minor scale, impacts to existing recreational facilities is less than significant.

**XVI. TRANSPORTATION/TRAFFIC** – Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	_____	_____	✓	_____
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	_____	_____	✓	_____
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	_____	_____	✓	_____

- d. Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?
- e. Result in inadequate emergency access?
- f. Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

		✓	
		✓	
		✓	

**Impact: Less Than Significant Impact**

The site access is located approximately 1,200 feet north of Taylor Boulevard and approximately 2,000 feet southwest of Reliez Valley Road. The project area will be accessed by a private driveway along the eastern side of Gloria Terrace. Gloria Terrace is a two-lane roadway with centerline striping and intermittent unimproved shoulders. As part of the incremental residential infill development along Gloria Terrace, sidewalks have been constructed sporadically on either side of Gloria Terrace. Other portions of Gloria Terrace have marginal (dirt, gravel, etc.) pedestrian paths established by use. As such there is no continual sidewalk along this stretch of road. Gloria Terrace is a local street and is not indicated on the County Circulation Element as a major arterial. No bicycle facilities or transit services (school buses excepted) are provided along the road right-of-way.

- a) The Contra Costa Transportation Authority (CCTA) Growth Management Plan, the West Contra Costa Transportation Advisory Committee (WCCTAC) Action 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 net new peak-hour trips. A project generating less than 100 peak-hour trips generally will not create or exacerbate a significant circulation impact.

The proposed project will generate less than 100 peak-hour trips.

Rate	Single-Family Detached House (210)
AM Peak Hour	0.75
PM Peak Hour	1.00
Weekday	9.52
Rate Based on # of Units	9 Units
AM Peak Hour	7
PM Peak Hour	9
Weekday	86
<b>Total</b>	<b>Total Trip Generation</b>
AM Peak Hour	7
PM Peak Hour	9
Weekday	86

Source: Institute of Transportation Engineers, Trip Generation, 9<sup>th</sup> Edition.

Using standard Institute of Transportation Engineers (ITE) Trip Generation trip rates, the 9-unit project will generate 7 gross a.m. peak-hour trips and 9 gross p.m. peak-hour trips. As such, the project will not generate a sufficient number of trips to exceed a standard measure of effectiveness for vehicular travel. The proposed project does not conflict with applicable plans for all modes of transportation.

However, according to the proposed “Gloria Terrace Shoulder Improvements” exhibit, date stamped June 16, 2016, the applicant/developer will improve two sections of existing sidewalk, install a new 36-inch-wide gravel path and paint two pedestrian street crossings. The installation of these improvements will provide current residents in the area and new pedestrians as a result of this project a safer, continual means to walk along Gloria Terrace.

- b) As the Congestion Management Agency (CMA), the CCTA is responsible for establishing, implementing, and monitoring the County’s Congestion Management Program (CMP). Through its implementation of the CMP, the CCTA works to ensure that roadways operate at acceptable levels of service and reviews development proposals to ensure that transportation impacts are minimized. The CCTA CMP establishes a network of arterials for levels of service (LOS) and other standards. Gloria Terrace is not listed as a significant arterial, however, Gloria Terrace intersects with Taylor Boulevard which is designated as an arterial of significance. The 2015 CMP Monitoring Report, monitors traffic performance every two years and evaluates traffic level of service standards on the CMP Network. Taylor Boulevard is included in the 2015 CMP Monitoring Report and is not identified as a roadway operating at unacceptable levels. As the project is not expected to generate significant amounts of peak hour traffic (e.g., 100 or more net new peak-hour trips), the project will not create a conflict with a CMP standard.

The project is required by County Code, Chapter 82-32 Transportation Demand Management, to prepare and implement a Traffic Demand Management (TDM) program that complies with the applicable ordinance requirements. As a condition of approval, the project sponsor will be required to provide the TDM to homebuyers no later than close of escrow.

- c) The project does not propose any structures that would interfere with air traffic patterns, nor would it increase air traffic levels. There is no impact related to air traffic.
- d) The proposed project will not significantly change the existing roadway design along Gloria Terrace with the improvement of an already existing driveway to the site. The improved access design comports with County standards, thus sight distance is not compromised at the project driveway. The proposed project will however increase pedestrian safety along Gloria Terrace due to the installation of several shoulder improvements (improving connectivity from Taylor Boulevard to Reliez Valley Road). Adherence to permit requirements administered by the Public Works Department for the shoulder improvement work implies that this portion of the project will result in negligible amounts of earthwork within an already disturbed roadway. As a result, the proposed project would not increase hazards for vehicles due to a design feature or incompatible uses.
- e) The proposed project will provide direct access to the site for emergency vehicles via the vehicular driveway off of Gloria Terrace. The private internal roadway design provides adequate circulation for emergency vehicles.

- f) The project proposes design features that accommodate pedestrians and improve pedestrian safety. Bicycle and transit service are not currently provided in the immediate area, and the project will not obstruct future consideration of these services by the County or other agencies. The proposed project does not conflict with applicable plans for all modes of transportation.

**XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	_____	_____	✓	_____
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	_____	_____	✓	_____
c. Require or result in the construction of new stormwater drainage facilities, the construction of which could cause significant environmental effects?	_____	_____	✓	_____
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	_____	_____	✓	_____
e. Result in a determination by the wastewater treatment provider that 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?	_____	_____	✓	_____
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's waste disposal needs?	_____	_____	✓	_____
g. Comply with federal, state and local statutes and regulations related to solid waste?	_____	_____	✓	_____

**Impact: Less Than Significant Impact**

- a) The subject property is located within an area of the County that is served by a public sanitary sewer district. Any future land uses and improvements established at the site would be subject to the standards and regulations of the Central Contra Costa Sanitary District (CCCSD). According to a CCCSD correspondence, dated February 24, 2016, sanitary sewer service is available to the project site via an eight-inch diameter public main sewer within Gloria Terrace. The developer would need to construct a set of on-site public main sewers and private laterals. The correspondence goes on to indicate that the project is not expected to create an unmanageable added capacity on the wastewater system, nor interfere with existing facilities.

- b) The proposed project has been reviewed by the CCCSD, who has advised that wastewater services is available for the proposed project. There was no indication from the sanitary district that the proposed project has the potential for exceeding the capacity of the public sanitary system that would result in the need for new or expanded wastewater facilities. The proposed project was also reviewed by the East Bay Municipal Utility District (EBMUD), which provides public water services to the site. The water district has advised that water service would be available for the proposed project and there was no indication of the need for new or expanded public water facilities. Based on the reviews conducted by the two agencies that provide water and wastewater services to the site, the potential for a significant environmental effect as a result of new or expanded water and wastewater facilities is less than significant.
- c-e) The proposed project is within existing urban boundaries, served by various utilities, including PG&E, telephone services, CCCSD and EBMUD. Since the proposed project is within their boundaries, and the various utility providers have indicated that capacity exists to accommodate the proposed 9 additional units to the area, it is not anticipated to require the construction of any new facilities.
- f-g) The subject property will be used for residential-related structures and land uses if the proposed subdivision is granted. Future development at the site would be limited to the land uses and structures permitted within a residential zoning district, and will be limited in scale due to the relatively small size of the project site. Therefore, the increase in solid waste disposal for any use that can be established at the project site in the future would have a less than significant impact on the sufficiency of the landfill that currently accepts waste produced at the site or for conflicting with Federal or State regulations regarding solid waste.

**XVIII. MANDATORY FINDINGS OF SIGNIFICANCE**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?	_____	_____✓_____	_____	_____
b. Does the project have impacts that are individually limited, but are 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)?	_____	_____	_____✓_____	_____



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

_____	_____	_____	_____
_____	_____	_____	_____✓

**Impact: Less Than Significant With Mitigation Incorporated**

- a) The addition of 9 dwelling units to the subject area has very little potential for degrading for quality of the environment, reducing habitat or plant/animal communities, or eliminating examples of California history. However, the associated grading and construction of the proposed future residences at the site may have impacts on cultural resources that have yet to be discovered. To mitigate those potential impacts, mitigation CUL-1 requires the cessation of work and further investigation by a qualified professional by to re-initiation of work. This mitigation will reduce the potential to undiscovered examples of major periods of California History or prehistory to a less than significant level. Other potentially significant impacts in the areas of biology, air, aesthetics, and noise have also been identified and mitigations have been incorporated into the project to lessen any potential impact to less than significant levels.
  
- b) Aside from the typical subdivision improvements (e.g., new residences, roads, grading, retaining walls, drainage and roadway shoulder improvements), there are no improvements proposed that will significantly alter the existing environmental conditions of the site. Nevertheless, 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. However, staff is aware of one other 4 lot subdivision along Gloria Terrace at 3274 Gloria Terrace. As with this project, that minor subdivision comports to all General Plan density requirements and Zoning development standards. Therefore, given that both projects are within the density ranges already evaluated within the 2005-2020 County General Plan, the cumulative impact of both projects occurring within a short period of one another represents a less than significant cumulative impact on the environment.
  
- c) The proposed project consists of the addition of 9 residential units to the subject property, and the construction of the associated improvements. The creation of those lots and residences may create potential for adverse impacts on human beings because of the construction phase of the project. However, to mitigate those potential significant impacts, mitigations have been incorporated that requires best management practices to be incorporated as part of the project. Therefore, as proposed, the project and incorporated mitigations will reduce the potential construction impacts on nearby residents of the project site to a less than significant level.

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Mitigation Measure #	Mitigation Measure	Implementing Action	Implementing Condition	Method of Verification	Timing of Verification	Party Responsible for Verification	Compliance Verification
MM AES-1	30 days prior to applying for building permits for each new residence, the applicant/property owner shall submit for review and approval of Department of Conservation and Development, Current Planning Division (CDD) staff construction drawings (e.g., site plan, floor plans, elevations and grading plans) to verify compliance with all mitigations and conditions of approval.	Submittal of a Condition of Approval application with all required reports and documentation and fee deposit.	Condition of Approval (COA) #13	Confirm all plans reports comport to applicable mitigations and conditions of approval.	30 days prior to applying for a building permit.	Applicant and Community Development Division (CDD) staff.	
MM AES-2	<p>Prior to recordation of the final map, the applicant shall submit for the review and approval of CDD staff a proposed deed restriction to be recorded concurrently with the approved final map that shall apply to future development of the subdivision with the following design standards:</p> <ul style="list-style-type: none"> <li>Residential buildings on lots 5, 7, 8 and 9 shall not exceed 18 feet in height above the 440 foot elevation level. Overall heights within stepped down portions of residences may exceed 18 feet but not more than 35 feet in height.</li> <li>Residential buildings on lots 5, 7, 8 and 9 shall be of a split level design to reduce effective visual bulk.</li> <li>Residential buildings on lot 6 shall not exceed 28 feet in height above the 437 foot elevation level.</li> <li>Terracing of buildings and retaining walls shall be parallel with slopes.</li> <li>Large expanses of any material in a single plane shall be avoided. On downhill elevations, building mass shall be broken up with horizontal and vertical elements.</li> <li>Cantilevering of buildings or decks on downhill slopes shall be avoided.</li> <li>Open or enclosed crawl spaces exceeding 6 feet in height at exterior walls of buildings are not allowed.</li> </ul>	Submittal of a deed disclosure containing language consistent with the approved mitigation measure.	COA #14	Review of deed disclosure language.	30 days prior to recordation of the final map.	Applicant and CDD staff.	

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	<ul style="list-style-type: none"> <li>Exposed retaining walls over 6 feet in height in a uniform plane shall be avoided. Terraced retaining walls shall be utilized whenever feasible.</li> <li>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.</li> </ul>						
MM AES-3	The applicant shall adhere to all of the recommended tree preservation measures outlined within the arborist report prepared by Timothy Ghirardelli, dated February 4, 2016. Compliance with the recommended tree protection measures shall be documented and provided to CDD staff in report form for review within 30-days of completion of the construction activities. All recommended tree protection measures shall be placed on the face of construction plans.	Submittal of a post-construction tree preservation report for review.	COA #16	Review of report.	Within 30-days of completion of construction activities.	Applicant and CDD staff.	
MM AES-4	30-days prior to applying for a residential building permit, the applicant shall submit for review and approval of CDD staff a lighting plan. Light standards shall be low-lying and exterior lights on the buildings shall be deflected so that lights shine onto individual lots and not toward adjacent properties; all subject to review and approval by CDD staff prior to issuance of a residential building permit.	Submittal of a lighting plan.	COA #15	Review of report.	30 days prior to applying for a residential building permit.	Applicant and CDD staff.	
MM AIR-1	Consistent with the Best Management Practices required by the BAAQMD, the following actions shall be incorporated into construction contracts and specifications for the project. All	Implementation of Best Management Practices during all phases of construction activities.	COA #21	Respond to any citizen complaints.	During all phases of construction activity.	Applicant.	

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	<p>measures shall be printed on the face of construction drawings:</p> <ul style="list-style-type: none"> <li>• All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.</li> <li>• All haul trucks transporting soil, sand, or other loose material off-site shall be covered.</li> <li>• All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</li> <li>• All vehicle speeds on unpaved roads shall be limited to 15 mph.</li> <li>• All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.</li> <li>• Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.</li> <li>• 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]). Clear signage shall be provided for construction workers at all access points.</li> <li>• All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.</li> <li>• A publicly visible sign shall be posted with the telephone number and contact information for the designated on-site</li> </ul>						

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Mitigation Measure #	Mitigation Measure	Implementing Action	Implementing Condition	Method of Verification	Timing of Verification	Party Responsible for Verification	Compliance Verification
MM BIO-1	<p>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.</p> <p>In order to avoid impacts to special-status bats, a biologist shall survey all trees onsite (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.</p> <p>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.</p>	<p>Conducting of a pre-construction survey and implementing actions if necessary.</p>	<p>COA #22</p>	<p>Review of pre-construction survey and findings.</p>	<p>On-going throughout all phases of construction activity.</p>	<p>Applicant's qualified biologist and CDD staff.</p>	

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Mitigation Measure #	Mitigation Measure	Implementing Action	Implementing Condition	Method of Verification	Timing of Verification	Party Responsible for Verification	Compliance Verification
MM BIO-2	<p>To ensure that impacts to nesting raptors are avoided or offset, the following mitigation measures will be implemented:</p> <p>a. In order to avoid impacts to nesting raptors, nesting surveys shall be conducted by a qualified raptor biologist prior to commencing with earth-moving or construction work, if this work would commence between February 1<sup>st</sup> and August 31<sup>st</sup>. The raptor nesting surveys shall include examination of all trees within 200 feet of the project site not just trees slated for removal.</p> <p>b. If nesting raptors are identified during the surveys, the dripline of the nest tree must be fenced with orange construction fencing (provided the tree is on the project site), and a 200-foot radius around the nest tree must be staked with orange construction fencing. If the tree is located off the project site, then the buffer shall be demarcated per above where the buffer occurs on the project site. The size of the buffer may be altered if a qualified raptor biologist conducts behavioral observations and determines the nesting raptor are well acclimated to disturbance. If this occurs, the raptor biologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting raptors. No construction or earth-moving activity shall occur within the established buffer until it is determined by a qualified raptor biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by August 1<sup>st</sup>. This date may be earlier or later, and would have to be determined by a qualified raptor biologist. If a qualified biologist is not hired to watch the nesting raptors then the buffers shall be</p>	<p>Conducting of a pre-construction survey and implementing actions if necessary.</p>	<p>COA #23</p>	<p>Review of pre-construction survey and findings.</p>	<p>On-going throughout all phases of construction activity.</p>	<p>Applicant's qualified biologist and CDD staff.</p>	

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	<p>maintained in place through the month of August and work within the buffer can commence on September 1<sup>st</sup>.</p> <p>c. Two surveys may be required to address both early and later nesting raptor species. Great horned owls and American kestrels begin nesting in February while red-tailed hawks and red-shouldered hawks begin nesting in early April. Thus, an early survey should be conducted in February if earth-moving work or construction is proposed to commence between February 1<sup>st</sup> and April 1<sup>st</sup>. If construction has not commenced by the end of March, a second nesting survey shall be conducted in April/May, commence after May but before September 1<sup>st</sup>, then the second survey shall be conducted within the 30-day period prior to site disturbance.</p> <p>d. If the early nesting survey identifies a large stick nest or other type of raptor nest that appears inactive at the time of the survey, but there are territorial raptors evident in the nest site vicinity, a protection buffer (as described above) shall be established around the potential nesting tree until the qualified raptor biologist determines that the nest is not being used. In the absence of conclusive observations indicating the nest site is not being used, the buffer shall remain in place until a second follow-up nesting survey can be conducted to determine the status of the nest and eliminate the possibility that the nest is utilized by a late-spring nesting raptor (for example, red-tailed hawk). This second survey shall be conducted even if construction has commenced. If during the follow-up late season nesting survey a nesting raptor is identified utilizing the nest, the protection buffer shall remain until it is determined by a</p>						

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MM BIO-3	<p>qualified raptor biologist that the young have fledged and have attained sufficient flight skills to avoid project construction zones. If the nest remains inactive, the protection buffer can be removed and construction and earth-moving activities can proceed unrestrained.</p> <p>A nesting 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 1. 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.</p>	<p>Conducting of a pre-construction survey and implementing actions if necessary.</p>	<p>COA #24</p>	<p>Review of pre-construction survey and findings.</p>	<p>On-going throughout all phases of construction activity.</p>	<p>Applicant's qualified biologist and CDD staff.</p>	



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MM CUL-1	<p>Stop work and conduct an evaluation of accidental discovery of human remains or find.</p> <p>Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined whether or not the remains are subject to the coroner's authority.</p> <p>If human remains are encountered, work shall halt within 50-feet of the find and the County Coroner notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendent to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. All work shall be postponed until a qualified archaeologist has had an opportunity to evaluate any potential find.</p>	<p>Stop work and conduct an evaluation of accidental discovery of human remains or find.</p>	COA #25	Report to CDD staff.	On-going throughout all phases of construction.	Applicant and CDD staff.	

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MM GEO-1	The applicant shall comply with specific standards and criteria for use in design and construction of the project (site grading, drainage and foundation design) as identified in the February 4, 2016, GFK & Associates, Inc. preliminary geologic investigation.	Incorporate all standards and criteria into construction plans.	COA #26	Review of construction plans.	During all phases of project development and implementation.	Applicant.	

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MM GEO-2	Concurrently with recordation of the Parcel Map, record a statement to run with deeds to the property acknowledging the GFK & Associates 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.	Provide a staff approved deed disclosure for concurrent recordation with the Parcel Map.	COA #27	Staff review and approval of deed disclosure language and recordation of approved deed disclosure.	30 days prior to filing of the Parcel Map for review and approval and concurrently recording the deed disclosure with the Parcel Map.	Applicant and CDD staff.	

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MM GEO-3	<p>1. At least 45 days prior to requesting a building permit, the project proponent shall submit a geology, soil, and foundation report for review by the Peer Review Geologist, and review and approval by CDD staff. Improvement, grading, and building plans shall carry out the recommendations of the approved report. This report shall include the following: California Building Code seismic parameters that are based on the prevailing code; site specific data on the orientation of bedding; evaluation of the design of water quality basin(s) and their locations with respect to planned improvements; evaluation of the potential for slope creep to adversely affect planned improvements; provide recommendations that address monitoring clearing and backfilling depressions created by removal of tree trunks and their major roots; evaluate grading plan with respect for the potential for seismic settlement and seismically-induced ground failure by recognized methods appropriate to soil conditions discovered during subsurface investigation; characterize the expansivity of the soils and bedrock on the site and provide measures to avoid/control damage to minimize expansive soil effects on structures. The report should also identify recommended geotechnical monitoring services during grading and foundation-related work and provide a corrective grading plan for the two soil creep areas, and address removal of undocumented fill.</p> <p>2. During grading, the geotechnical engineer shall observe and approve any keyway excavations deemed necessary; removal of any existing fill materials down to stable bedrock or in-place material; and installation of all subdrains including their connections. All fill slope construction shall be observed and tested by the project geotechnical engineer, and the density test</p>	<p>Submittal of a geology, soil and foundation report.</p>	<p>COA #28</p>	<p>Peer review Geologist to review and approve report.</p>	<p>At least 45 days prior to requesting a building permit.</p>	<p>Applicant, Peer Review Geologist and CDD staff.</p>	

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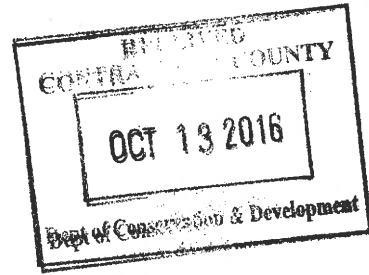
Mitigation Measure #	Mitigation Measure	Implementing Action	Implementing Condition	Method of Verification	Timing of Verification	Party Responsible for Verification	Compliance Verification
	<p>results and reports submitted to the County to be kept on file. Cut slopes and any keyways shall be periodically observed and mapped by the project geotechnical engineer/engineering geologist who will provide any required slope modification recommendations based on the actual geologic conditions encountered during grading. Written approval from the Contra Costa County Building Inspection Division shall be obtained prior to any modification.</p> <p>3. Prior to issuance of residential building permits, the applicant shall submit a geotechnical monitoring and testing report. That report shall include evidence of testing and observation services performed during rough grading, including (i) a map showing the as graded cut/fill contact, along with geologic mapping of all bedrock cut slopes and cut pad areas, and (ii) results of all compaction test data gathered during grading.</p> <p>4. Prior to requesting a final building inspection for a new residence, submit a geotechnical letter-report documenting inspections made by the project geotechnical engineer during foundation-related work and final grading, and provide the geotechnical engineer's opinion of the consistency of the as-built improvements with recommendations in the approved geotechnical report.</p> <p>5. Grading, improvement, erosion control and building plans shall employ, as appropriate, the following surface drainage measures:            (i) positive grading of building pads for removal of surface water from foundation areas; (ii) collection of downspout water from roof gutters; (iii) avoidance of planted areas immediately adjacent</p>						

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MM NOISE-1	<p>to structures; (iv) avoidance of sprinkler systems (as opposed to drip irrigation systems) in the immediate vicinity of foundations; (v) grading of slopes to control erosion from over-the-bank runoff; and (vi) re-vegetation of permanent slopes. Interim protective measures for runoff shall be followed during the construction phases when slopes are most susceptible to erosion. The final design shall incorporate drainage measures, including the installation of subsurface drains, where recommended by the project geotechnical engineer.</p> <p>6. Geologic/Geotechnical reports and Grading/Drainage/Foundation shall be subject to review by the Peer Review Geologist and approval by CDD staff.</p>	<p>Implementation of Noise related best management practices as indicated in mitigation measure.</p>	COA #29	Respond to any complaints by neighbors.	On-going throughout all phases of construction.	Applicant and CDD staff.	

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	4. Prior to issuance of building permits (residences), the proposed roads serving this development shall be constructed to provide access to each lot. This shall include provision for an on-site area in which to park earth moving equipment. 5. Transporting of heavy equipment and trucks shall be limited to weekdays between the hours of 9:00 A.M. and 4:00 P.M. and prohibited on Federal and State Holidays. 6. The site shall be maintained in an orderly fashion. Following the cessation of construction activity, all construction debris shall be removed from the site. 7. All construction activities shall be limited to the hours of 8:00 A.M. to 5:30 P.M., Monday through Friday, and shall be prohibited on state and federal holidays on the calendar dates that these holidays are observed. 8. Prohibit unnecessary idling of internal combustion engines. 9. Locate stationary noise generating equipment as far from surrounding residential properties as possible.						



October 5, 2016

Francisco Avila, Senior Planner  
Contra Costa County  
Department of Conservation and Development  
Community Development Division  
30 Muir Road  
Martinez, CA 94553

Re: Notice of Intent to Adopt a Mitigated Negative Declaration – Gloria Terrace Estates, Lafayette (County File #SD16-9429)

Dear Mr. Avila:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Mitigated Negative Declaration for the Gloria Terrace Estates Project located in Contra Cost County (County). EBMUD has the following comments.

### **WATER SERVICE**

EBMUD's Colorados Pressure Zone, with a service elevation range between 250 feet and 450 feet, will serve the proposed development. A water main extension, at the project sponsor's expense, will be required to serve the proposed development. When the development plans are finalized, the project sponsor should contact EBMUD's New Business Office and request a water service estimate to determine costs and conditions for providing water service to the proposed development. Engineering and installation of water mains and services require substantial lead time, which should be provided for in the project sponsor's development schedule.

### **GEOLOGY**

In Section IV, Geology and Soils, page 21, it states that creeping soil has been mapped throughout the development area. When the project sponsor applies for water service, they will need to provide EBMUD with any proposed soil creep mitigation measures for the development so that no soil creep impact hazard is posed to proposed water main extensions that will serve the development.



## WATER CONSERVATION

The proposed project presents an opportunity to incorporate water conservation measures. EBMUD requests that the County include in its conditions of approval a requirement that the project sponsor comply with Assembly Bill 325, "Model Water Efficient Landscape Ordinance," (Division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495). The project sponsor should be aware that Section 31 of EBMUD's Water Service Regulations requires that water service shall not be furnished for new or expanded service unless all the applicable water-efficiency measures described in the regulation are installed at the project sponsor's expense.

If you have any questions concerning this response, please contact Timothy R. McGowan, Senior Civil Engineer, Major Facilities Planning Section at (510) 287-1981.

Sincerely,



David J. Rehnstrom  
Manager of Water Distribution Planning

DJR:SHJ:dks  
sb16\_192.doc

cc: Gloria Terrace LLC  
3189 Danville Boulevard, Suite 245  
Alamo, CA 94507

H. F. Layton  
191 Sand Creek Road #220  
Brentwood, CA 94513