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Environmental Filing

Lead Agency:

Department of Conservation and Development

30 Muir Road
Martinez, CA 94553

Phone:1-855-323-2626

Contra Costa County

November 14, 2019

NOTICE OF PUBLIC REVIEW AND INTENT TO ADOPT
A PROPOSED MITIGATED NEGATIVE DECLARATION
County File No. DP05-3058

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 Community Development Division of the Department of Conservation and Development of Contra Costa County has prepared an initial study on the following project:

PROJECT TITLE: King Estates Final Development Plan Amendment

APPLICANT: Sequoia Land Investments
Attn: Bob Carrade, Ph: (415) 944-6161
1-C Gate Five Road
Sausalito, CA 94965

LOCATION: The project site is located at the intersection of King Drive and Oak Branch Way (not in Rossmoor) in the Saranap area of unincorporated Walnut Creek, California 94595. Assessor Parcel Numbers: 238-040-011 through -016

DESCRIPTION:

Project Description: The project proposes the following: (a) to amend the final development plan, including regrading and realignment of a portion of Oak Branch Way and two turnarounds, and construction of subdivision improvements; (b) an exception to the standards of the Subdivision Ordinance governing the design of private roads to allow a portion of Oak Branch way to exceed 20 percent in gradient; (c) to amend Tree Permit #TP02-0008 (which permitted removal of 112 trees) to allow removal of 113 trees (including 68 trees already removed by previous work) to accommodate the construction of the proposed remedial subdivision improvements and eventual lot development, and to reduce the replanting requirement from "up to" 221 trees to 25 trees, and to work within the driplines of 12 trees to be preserved; (d) a grading permit to grade 3,131 cubic yards of soil; (e) approval of the proposed location of residences based on the conceptual plans provided, and details of retaining walls (i.e. location, height, type, batter); and (f) modify the boundary of the deed restricted scenic easement space and increase the easement area from the 311,844 square feet to 317,270 square feet to insure that all graded and developed areas are kept outside of the private open space areas.

Site and Area Description: The site is located on the south perimeter of an established neighborhood of up-scale residences of varying age on lots zoned Single Family Residential R-10 and R-20. The site itself is a forested, steep, north-facing hillside that is approximately ¼ miles southwest of Olympic Boulevard/Tice

Valley Boulevard intersection. To the west and east off the site are vacant lands, and immediately south of the site is the Rossmoor senior-living community in the City of Walnut Creek.

ENVIRONMENTAL EFFECTS:

The Initial Study for the proposed project identified potentially significant impacts in the environmental area of biology and geology/soils. Environmental analysis determined that measures were available to mitigate potential adverse impacts to insignificant levels. As a result, a Mitigated Negative Declaration (MND) has been prepared pursuant to Public Resources Code Section 21080(c), 21063.5, and Article 6 of the California Environmental Quality Act (CEQA) Guidelines.

Pursuant to the requirements of CEQA (CEQA Guidelines Section 15071) the MND describes the proposed project; identifies, analyzes, and evaluates the potential significant environmental impacts, which may result from the proposed project; and identifies measures to mitigate adverse environmental impacts. The mitigations identified in this document and designed for the proposed project, will ensure that the project will not cause a significant impact on the environment.

A copy of the mitigated negative declaration and all documents referenced in the mitigated negative declaration may be reviewed during business hours in the offices of the Department of Conservation and Development, and Application and Permit Center at **30 Muir Road, Martinez, CA**.

Public Comment Period - The Period for accepting comments on the adequacy of the environmental documents extends to **Monday, December 16, 2019, at 5:00 P.M.** Any comments should be in writing and submitted to the following address:

Name: Gary Kupp, Senior Planner (925) 674-7799
Community Development Division
Contra Costa County, Department of Conservation and Development
30 Muir Road
Martinez, CA 94553

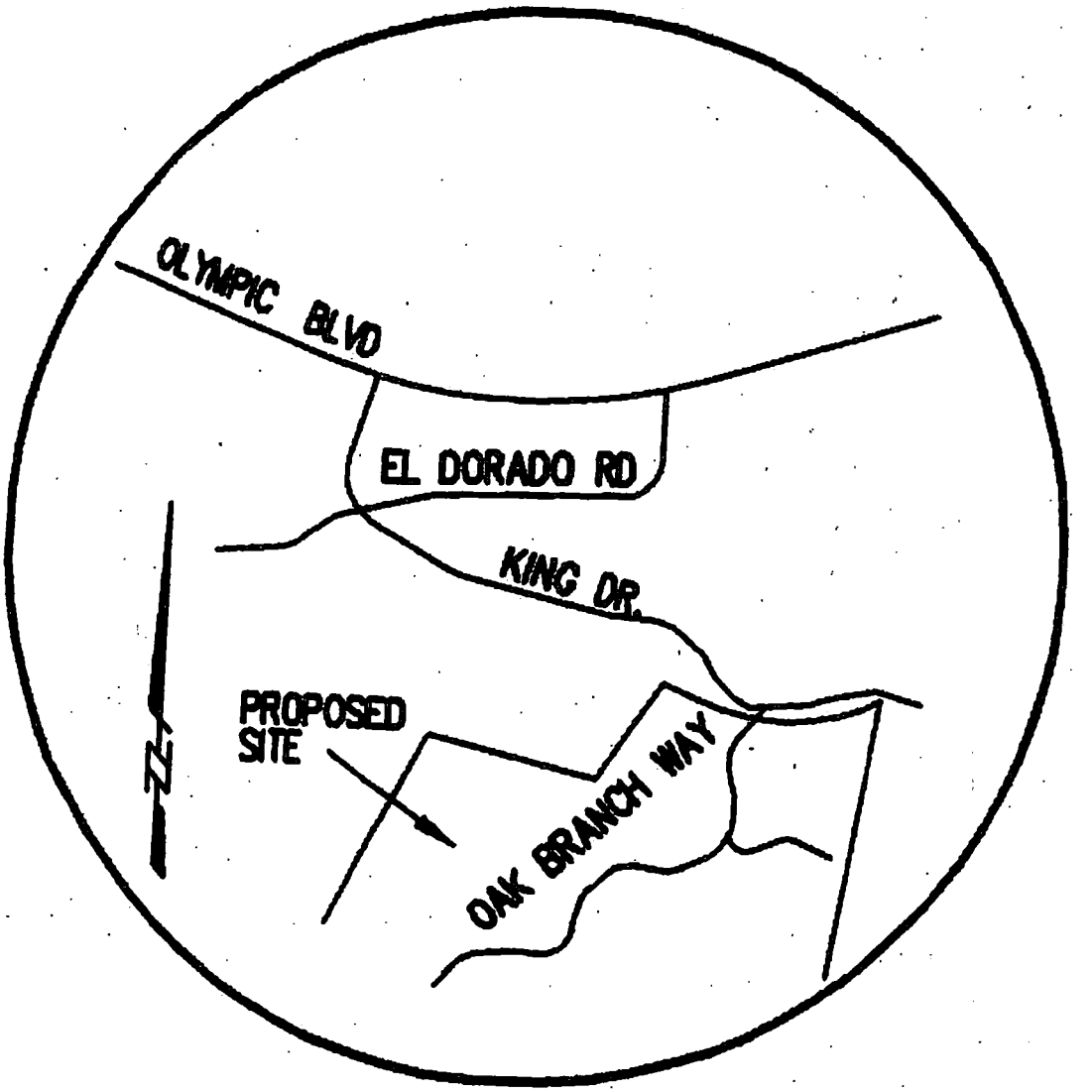
Sincerely,

Gary Kupp
Senior Planner

cc: County Clerk's Office (2 copies)
Adjacent Occupants and Owners
Notification List

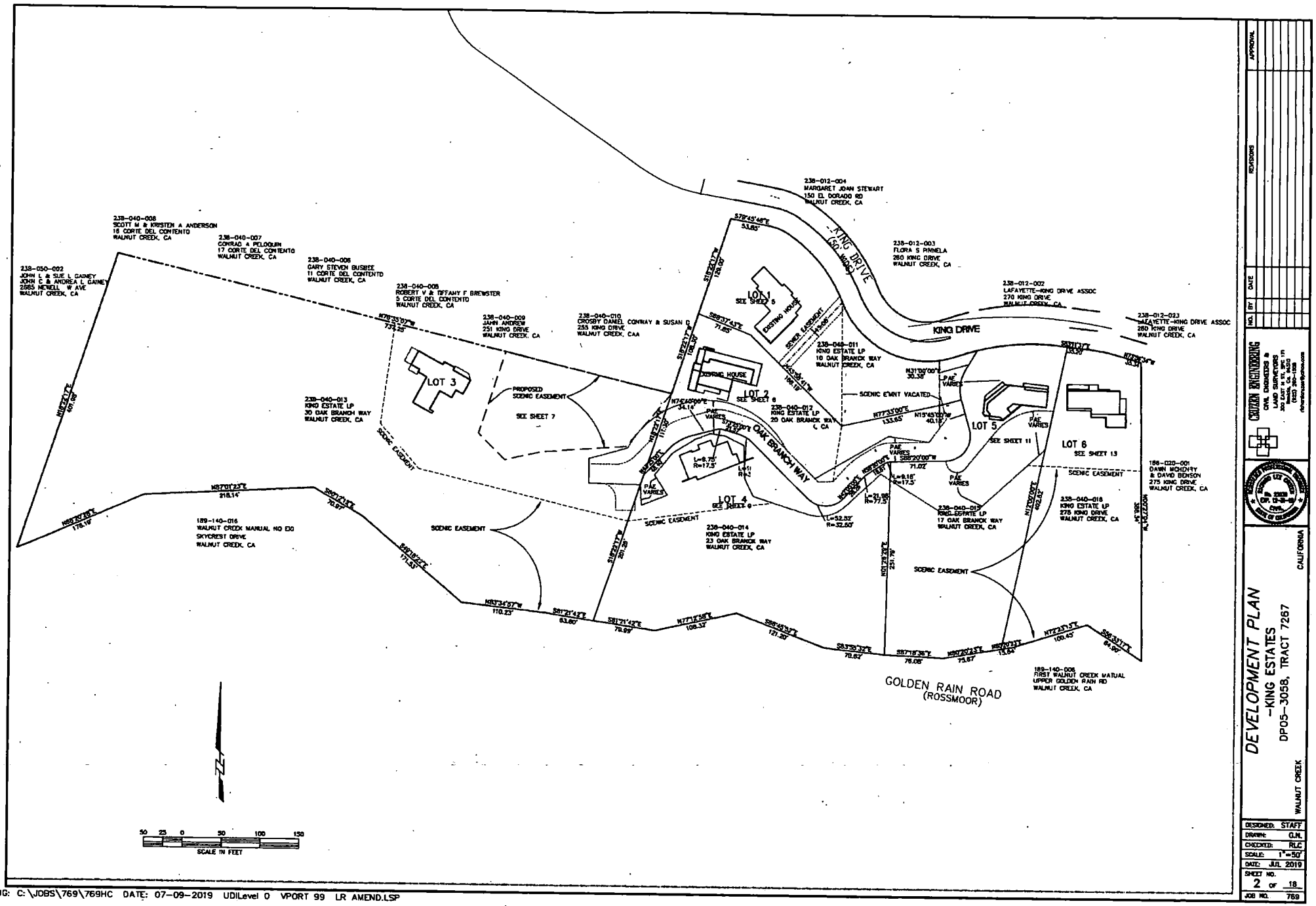
attach: Vicinity Map & Site Plan

WALNUT CREEK, CA 94595



VICINITY MAP

N.T.S.



DEVELOPMENT PLAN
-KING ESTATES
DP05-3058, TRACT 7267
WALNUT CREEK
CALIFORNIA

DESIGNED:	STAFF
DRAWN:	CLN
CHECKED:	RLC
SCALE:	1"=50'
DATE:	JUL 2019
SHEET NO.	2 OF 18
JOB NO.	769

DRAWING: C:\JOBS\769\769HC DATE: 07-09-2019 UDILevel 0 VPORT 99 LR AMEND.LSP

CEQA ENVIRONMENTAL CHECKLIST FORM

1.	**Project Title:**	King Estates Final Development Plan Amendment (County File #DP05-3058)
2.	**Lead Agency Name and Address:**	Contra Costa County Department of Conservation and Development 30 Muir Rd., Martinez, CA 94553
3.	**Contact Person and Phone Number:**	Gary Kupp, Senior Planner, (925) 674-7799
4.	**Project Location:**	The site is located near the southeast terminus of King Drive. The six legally established lots take immediate access from private road, Oak Branch Way (not in Rossmoor), in the Saranap area of Walnut Creek, CA. The site may be further identified as APN 238-040-011 through -016.
5.	**Project Sponsor's Name and Address:**	Sequoia Land Investments, Attn: Rob Carrade, 1-C Gate Five Rd., Sausalito, CA 94965 (Applicant); Susan Cook, 1-C Gate Five Rd., Sausalito, CA 94965 (Owner).
6.	**General Plan Designation:**	(SV) Single Family Residential Very Low Density
7.	**Zoning:**	(P-1) Planned Unit Development

8. Description of Project / Background:

Project Description: The project proposes the following: (a) to amend the final development plan, including regrading and realignment of a portion of Oak Branch Way and two turnarounds, and construction of subdivision improvements; (b) an exception to the standards of the Subdivision Ordinance governing the design of private roads to allow a portion of Oak Branch way to exceed 20 percent in gradient; (c) to amend Tree Permit #TP02-0008 (which permitted removal of 112 trees) to allow removal of 113 trees (including 68 trees already removed by previous work) to accommodate the construction of the proposed remedial subdivision improvements and eventual lot development, and to reduce the replanting requirement from "up to" 221 trees to 25 trees, and to work within the driplines of 12 trees to be preserved; (d) a grading permit to grade 3,131 cubic yards of soil; (e) approval of the proposed location of residences based on the conceptual plans provided, and details of retaining walls (i.e. location, height, type, batter); and (f) modify the boundary of the deed restricted scenic easement space and increase the easement area from the 311,844 square feet to 317,270 square feet to insure that all graded and developed areas are kept outside of the private open space areas.

Background: The project is an approved 6-lot residential subdivision within a planned unit development. The Final Map for was recorded in year 2000, and on June 19, 2001, an amended

final development plan was approved. Shortly thereafter, the development of the site proceeded with the installation of improvements (utilities, drainage facilities, road improvements, and driveways). Additionally, building permits were issued for construction of residences on Lot 1 and Lot 2. During construction it was established that the roadway improvements differed from plans approved by the county, and a Notice of Violation of Subdivision Law was recorded in April 2005. During the past 14 years, the owner submitted amended final development plans that were intended to reconcile differences between as-built site development and the final development plan approved by the County in 2001. However, those submittals were never deemed to be complete. In 2017, the current amended final development plan application was submitted, and subsequently deemed complete on August 14, 2019, and it is the intent of this application to correct the discrepancies created by previous developers and bring the project into conformance with the intent of the original entitlement approvals.

9. Surrounding Land Uses and Setting:

The site is located on the south perimeter of an established neighborhood of up-scale residences of varying age on lots zoned Single Family Residential R-10 and R-20. The site itself is a forested, steep, north-facing hillside that is approximately ¼ miles southwest of Olympic Boulevard/Tice Valley Boulevard intersection. To the west and east off the site are vacant lands, and immediately south of the site is the Rossmoor senior-living community in the City of Walnut Creek.

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

A. Contra Costa County Department of Conservation and Development (COA compliance, tree permit, grading and building permits, and compliance with provisions of the General Plan and Zoning Ordinance)
B. Contra Costa County Public Works Department (roads/driveways, traffic, drainage, stormwater control)
C. Central Contra Costa Sanitary District (sewage)
D. East Bay Municipal Water District (domestic water)
E. Contra Costa Fire Protection District (fire code compliance)

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

The Wilton Rancheria was solicited for comment on August 15, 2019 regarding their interest in potential Native American resources on the project site. No response or comment was received during the comment period.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☒ Biological Resources	☐ Cultural Resources	☐ Energy
☒ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Services Systems	☐ Wildfire	☐ Mandatory Findings of Significance

Environmental Determination

On the basis of this initial evaluation:

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

☒ I find that, although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Gary Kupp
Senior Planner
Contra Costa County

11/14/19
Date

ENVIRONMENTAL CHECKLIST

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. *AESTHETICS* – *Except as provided in Public Resources Code Section 21099, would the project:*				
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 building within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

SUMMARY:

a) Would the project have a substantial adverse effect on a scenic vista? **(Less than significant.)**

The Transportation and Circulation Element (Figure 5-4) officially designates scenic routes in Contra Costa County. A scenic corridor is described as "usually much wider than the road right-of-way and extends to contiguous areas beyond it." According to the Transportation and Circulation Element, controls should be applied to retain and enhance scenic qualities along the entire scenic corridor. The nearest designated scenic route in the project vicinity is the segment of Tice Valley Boulevard that is east of the main entrance to the Rossmoor senior-living development. In summary, there are no official scenic routes in the site vicinity. There are controls in the Transportation and Circulation Element that can be applied to views from officially designated scenic routes, aimed at retaining and enhancing views from designated scenic routes by restricting unsightly uses of the land, by controlling the heights of structures, and/or providing site design and architectural guidance. However, in this case the hillside that is the project site is densely wooded and the future residences will be screened or partially screened by the existing oak woodland vegetation and will not be starkly or obtrusively visible, and the roadways that do have vantage points are not designated as scenic routes. Furthermore, the residences are not proposed to be constructed on the ridge crest, which helps to limit visibility. There are two residences on the site that have already been constructed, and they are not visible from community vantage points on Olympic Boulevard, which is not a scenic route. In the case of the remaining lots proposed for development, the sites are wooded, which will tend to screen views of the futures residences. The General Plan also identifies scenic ridges and waterways. The Open Space Element (Figure 9-1) identifies the nearest scenic ridge as the Las Trampas Ridge and its associated spur ridges, located approximately ½ mile south-southeast of the project site. There are no officially designated scenic waterways in the site vicinity. Thus, the project will have a less-than-significant impact on this analysis category.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

b) *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?* **(No impact.)**

The project site is not located within a state scenic highway. State Route 24 is the nearest designated scenic highway, which passes nearly 2 miles north of the subject site. Due to distance and tree cover, the site has very limited visibility from State Route 24. The project is a 6-lot residential subdivision on an approximately 11.2-acre project site, with 7.2 acres of deed-restricted private open space. As viewed from State Route 24, which is 2 miles north of the project site, a green, wooded hillside is visible. There are no historic buildings present and no rock outcroppings occur on the site. The application proposes the removal of trees for road realignment and the development of the subdivision, but these trees are not located within a scenic highway, and due the heavily wooded nature of the site, their removal will not be visually noticeable. Thus, the project will have no impact on resources within a scenic highway.

c) *In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?* **(Less than significant.)**

The site is within an urbanized unincorporated area of Walnut Creek. The project is an in-fill project that is bounded to the south and north by existing residential uses. As proposed, the project will have only a minor effect on short-range views of the site from the immediately adjacent neighborhood. The proposed subdivision improvements consist of a relatively minor adjustment to the horizontal and vertical alignment of Oak Branch Way; the construction of turnarounds on the driveway to Lot #1 and on the west portion of Lot #4; and construction of retaining walls along the alignment of Oak Branch Way. The construction of dwellings on Lots 3 through 6 will afford only short range views which will be largely screened by existing mature trees. A prominent visual feature at the entrance to the project is a rock-pin wall that will to range up to 20 feet in height. This wall will be faced with textured gunite to match the existing soil nail wall located just upslope of the Oak Branch Way intersection with the driveway access to Lots 5 and 6. Other lower-height retaining walls are proposed along Oak Branch Way in the interior of the project. Each of these retaining walls will be engineered and constructed as part of the subdivision improvements. The use of walls minimizes the footprint of grading that could affect the visual character of the site, and minimizes loss of trees, as well as providing stability performance for steep cut or fill slopes. Therefore, the project will have less-than-significant impacts on this analysis category.

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

Historically the site has been vacant with no nighttime lighting. The proposed development plan amendment does not propose any street lighting of Oak Branch Way. Once residential uses are

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

established on the site, nighttime lighting associated with the residential uses would add new sources of light that currently do not exist on the site, but given the very low density of housing, the contribution of nighttime lighting of the residences, although potentially noticeable, would not be substantial, and therefore any such impacts will be less than significant.

Sources of Information

- Project application materials and plans for County File #DP05-3058
- Contra Costa County General Plan
- Contra Costa County Zoning Code (Title 8)
- Department of Conservation and Development, Accela GIS

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2. *AGRICULTURAL AND FOREST RESOURCES* – *Would the project:*				
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?	☐	☐	☐	☒

SUMMARY:

a) *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?* **(No impact.)**

The project site is not designed prime farmland, unique farmland, or farmland of statewide importance. As mapped by the Soil Survey of Contra Costa County, the soil series that occurs on the site is the Lodo clay loam (LcF, 30 to 50% slopes; and LcG, 50-75% slopes). Theses soils are used for range, wildlife habitat and watershed. They are Class VII soils, whose primary limitations for use are the erosion hazard. Due to the steepness of the parcel, and its size, the project site it is not suitable for a commercial agricultural operation

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? **(No impact.)**

The site is not within a Williamson Act Contract, and the property is not zoned for agricultural use, nor is it capable of supporting commercial agriculture. No rezoning of the property to a non-agricultural designation is being proposed, nor is it necessary in order to implement the project, as the site is currently zoned P-1 (Planned Unit District). In summary, the proposed project is consistent with long-term goals of the County as designated by the Land Use Element of the General Plan, and the potential for impacts associated with loss of agricultural land is negligible.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

c) *Would the project 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) or 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)?* **(No impact.)**

The site is zoned P-1 (Planned Unit District), which is appropriate for implementation of the proposed project, therefore rezoning of the site is unnecessary. The site is not zoned for timberland production, and since the site is already zoned appropriately for the proposed project, there is no conflict.

d) *Would the project involve or result in the loss of forest land or conversion of forest land to non-forest use?* **(Less than significant.)**

According to the County's GIS information, the site is designated "Forest Lands" by the California Department of Forestry (CDF), but is zoned P-1 (Planned Unit District); therefore, there will be no loss of forest land due to conversion to a non-forest use. Nevertheless, the site is heavily wooded and the CDF's designation requires that the trees be preserved as much as possible. The existing entitlements for the project include an already-approved tree permit (#TP02-0008) to allow the removal of 112 trees for the development of the street and home construction, which will require the replanting of up to 221 new trees. The tree permit will be amended to allow removal of 113 trees (including 68 trees already removed by previous work) and to reduce the replanting requirement from "up to" 221 trees to 25 trees. Since the site is so heavily wooded, the project arborist has determined that a large number of replanted trees is unnecessary and undesirable, so the reduced number of replanted trees is appropriate for the site. Therefore, project impacts to CDF forest lands are less than significant.

e) *Would the project involve other changes in the existing environment, which due to their location or nature, could result in conversion of farmland, to non-agricultural use?* **(No impact.)**

The project site and adjacent properties to the east and west are designated single-family residential, very low density (SV) by the Land Use Element of the General Plan. Because the project is consistent with prevailing General Plan and zoning designations, and is bounded upslope and downslope by existing residential uses, it can be considered to be an in-fill project. Furthermore, the site is approximately 11.2 acres in area, which is too small to support commercial agriculture. Based on these factors, the potential for the project to adversely impact agriculture or trigger conversion of agricultural lands to non-agricultural uses.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Sources of Information

- Project application materials and plans for County File #DP05-3058
- Contra Costa County General Plan
- Contra Costa County Zoning Code (Title 8)
- Department of Conservation and Development, Accela GIS, CDF "forest lands" layer
- Soil Survey of Contra Costa County, California
- 2016 Contra Costa County Important Farmlands Map
- Contra Costa County Tree Permit #TP02-0008

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

SUMMARY:

a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?* **(No impact.)**

The 2017 Clean Air Plan, prepared by the Bay Area Air Quality Management District (BAAQMD), is the most recent plan prepared to fulfill State and federal air pollution reduction requirements. The 2017 plan provides a regional strategy to protect public health and protect the climate, as well as describing how the Air District will continue to progress toward attaining all state and federal air quality standards, and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To accomplish this, the 2017 plan describes a multi-pollutant strategy to simultaneously reduce emissions and ambient concentrations of ozone, fine particulate matter, toxic air contaminants, as well as greenhouse gases (GHG) that contribute to climate change. The modification of the final development plan or any other aspects of the proposed project do not conflict with or obstruct implementation of any air-quality plans for the region; therefore, the project will have no impact on this analysis category.

b) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?* **(Less than significant.)**

Based on EPA data, in 2019 Contra Costa County had a "marginal" air pollutant non-attainment status for Ozone (i.e. "smog") and Particulate Matter 2.5 (PM-2.5). Non-attainment is a classification applied to an area that had one or more violations within the last three years. The EPA did not provide data identifying how many violations were identified in Contra Costa County or where the violations occurred, but both smog and PM-2.5 are pollutants commonly associated with dense urban areas such as the metropolitan Bay Area, therefore it can be reasonably assumed that the violations were logged in the more densely populated areas of central and western Contra Costa County. Contra Costa County and the project site are also currently designated as an "attainment area" for carbon monoxide (CO), which means no violations or exceedances of air-quality standards for CO were reported. Due to the low-density

nature of the King Estates subdivision, and the expected future residential use of the site, it will not will not be a source of criteria air pollutants. Excessive emission of criteria air pollutants are not typically associated with residential uses, but are usually generated by traffic congestion, petroleum refining and other industrial and commercial uses. Thus any project impacts to state ambient air quality standards will be less than significant.

c) *Would the project expose sensitive receptors to substantial pollutant concentrations?* **(Less than significant.)**

The BAAQMD is the responsible agency for regulating air quality within the San Francisco Bay Area Air Basin (SF Basin) and keeping within federal and state standards. The site and the majority of surrounding properties are residential lots, and therefore are considered sensitive receptors based on the BAAQMD definition. BAAQMD defines sensitive receptors as facilities and land uses where groups such as children, the elderly, the acutely ill, and the chronically ill are likely to be located. These land uses include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, medical clinics, etc. Emission of air pollutants associated with this project would be generated by short-term construction activities such as demolition, grading, street and utility improvements, and the future development of the remaining lots. These short-term impacts would primarily be due to emissions from construction and grading equipment, delivery trucks for building materials and equipment to the site, and vehicle emissions associated with commute trips to the project site by construction workers. These short-term impacts would be temporary in duration and are therefore less than significant. Once construction is completed, the only air quality impacts would be associated with residential uses at the site and traffic for up to a maximum of up to six future homes. Once the subdivision is developed, any air quality impacts would be from typical emissions associated with residential neighborhoods; residential land uses are not significant sources of air pollution. Furthermore, since only six future residences are anticipated, any traffic increases to the area will be negligible, so any air quality impacts relating to residential traffic would be less than significant.

d) *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?* **(No impact.)**

The proposed residential subdivision does not include any odor-generating activities. Common odor-generating land uses typically involve petroleum refining, natural gas production, manufacturing, fabrication, rendering of animal products, manure production or use, painting, agricultural uses, landfills, etc. The completed project would consist of a six-lot residential development. Residential developments are not considered sources of odor. The proposed subdivision will have no impact on this category.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Sources of Information

- Project application materials and plans for County File #DP05-3058
- Contra Costa County General Plan
- Contra Costa County Zoning Code (Title 8)
- Contra Costa County Climate Action Plan
- Bay Area Air Quality Management District website
- Air Resources Board website
- Environmental Protection Agency Nonattainment Data

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4. *BIOLOGICAL RESOURCES – Would the project:*				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a 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?	☐	☐	☒	☐

SUMMARY:

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

Special-status species are plants and animals that are legally protected under the state and/or federal Endangered Species Act or other regulations. The Federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall utilize their authority to conserve endangered and threatened plant and animal species. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species. Special-status species also include other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. Special-status plants are those which are designated rare, threatened, or endangered and candidate species for listing by the United States Fish & Wildlife Service

(USFWS). Special-status species also include those considered rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act Guidelines, such as those plant species identified on Lists 1A, 1B and 2 in the Inventory of Rare and Endangered Vascular Plants of California by the California Native Plant Society (CNPS, 2010). Finally, special-status plants may include other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on List 3 in the CNPS Inventory.

The project biologists, Monk & Associates (M&A), present a listing of the status and habitat requirements of special-status plant and wildlife species that have been documented near the project site, followed by a discussion that includes an assessment of the likelihood of occurrence of special status species in the site. The evaluation of M&A gave consideration to the following factors: (i) distribution of regional occurrences (if any) of the species, (ii) habitat suitability, and (iii) field observations. The following discussion is intended to highlight and summarize the findings of M&A.

- Only one special-status plant was identified on the project site by M&A's during a spring 2011 special-status plant survey.
- Although not observed on the site during spring season surveys, M&A conclude that the project site's oak/bay woodland with its open, grassy understory provides suitable habitat for four other special-status plant species: (i) Small-flowered monolopia (*Monolopia gracilens*), (ii) Bent-flowered fiddleneck (*Amsinckia lunaris*), (iii) Mount Diablo fairy-lantern (*Calochortus pulchellus),* (iv) Fragrant fritillary (*Fritillaria liliacea*)

M&A also provide an assessment of the potential for special status wildlife on the site, while acknowledging that no special-status animals have ever been observed on or adjacent to the project site. According to the California Natural Diversity Database (CNDDB), a total of 9 special-status animal species are reported to have occurred within five miles of the project site (some of these records are museum records from the early 1900s). M&A conclude that only two have any possibility of occurring on the project site: Pallid bat (*Antrozous pallidus*) and Townsend's big-eared bat (*Corynorhinus townsendii townsendii*). Additionally, based on M&A's experience working in oak/bay woodland habitats in Contra Costa County, it is their expectation that raptors such as the red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), great horned owl (*Bubo virginianus*), and western screech owl (*Megascops kennicottii*), among others, could also nest on the project site.

Mitigation Measure (BIO-1): Diablo Helianthella

Impact: Development of the site poses a potential to adversely impact Diablo helianthella, a special-status plant that has been confirmed to be present on the site in several locations during a 2011 plant survey. Earthwork, and the construction of road improvements, including driveways, turnarounds, retaining walls, and dwellings poses a hazard to this plant species.

Mitigation Measures:

1. A CNDDB form shall be filled out and submitted to California Department of Fish & Wildlife (CDFW) by a qualified biologist for these populations once the current number and exact location of populations are established by a protocol preconstruction survey.

2. Diablo helianthella plants on the project site should be avoided to the extent feasible, and protected behind temporary orange construction fencing (4 ft. high). This fencing shall be placed to prevent inadvertent damage to the Diablo helianthella plant population during grading and other construction activity. The limits of the protective fencing shall be shown on site grading plans, based on final review and approval of the project biologist. This temporary fencing shall not be removed until all construction work has been completed.

3. At least 30 days prior to commencement of any construction activity or tree removal, the project biologist shall submit a compliance report to the Community Development Division, documenting that the exclusionary fencing for Diablo helianthella has been installed, as shown on the site grading plans. The compliance report shall detail that the protective fencing for this special-status plant has been properly installed and that the as-installed fencing is consistent with the exclusionary fencing shown on project grading plans.

4. If avoidance of Diablo helianthella as prescribed above is not feasible, the following mitigation shall be implemented:

- If installation of the ungrouted-rock pin wall below Lot #4 or elsewhere on the project site has the potential to impact the plants during its installation, a biologist should be onsite during wire wall installation to ensure that this work takes place without adversely affecting the populations. If rock pin wall installation cannot avoid impacting the plants during its placement then mitigation as described below will be necessary.
- A mitigation plan shall be developed by a qualified botanist and submitted to CDFW personnel since the plant is a CNPS Rank 1B species, and the plant is protected pursuant to CEQA. Some provisions of the mitigation plan may require implementation prior to the initiation of grading or issuance of building permits, others implemented during the construction period, and still others during the monitoring period. The mitigation plan must be submitted to CDFW and the Community Development Division prior to any construction-related activity on the site for review and approval. As part of the mitigation plan, prior to grading or construction activity on the project area, (i) a qualified botanist should collect the propagules including seeds that would ensure successful replanting of the population elsewhere, (ii) the seeds should be collected at the appropriate time of the year, (iii) half of the seeds collected should be appropriately stored in long-term storage at a native seed nursery, botanic garden or museum (e.g., Pacific Coast Seed, UC Berkeley

Herbaria, or Rancho Santa Ana Botanic Garden), (iv) the other half of the seeds, propagules, or other plantable portion of all plants should be planted at the appropriate time of year (late-fall months) in portion of the site that is deed restricted private open space (the area that receives the planting shall be protected with permanent fencing to ensure adequate protection of the Diablo helianthella planting). These four steps should be implemented prior to site disturbance. Additionally, (v) the project proponent shall retain a qualified biologist to conduct annual monitoring surveys of the transplanted plant population for a five-year period, and should prepare annual monitoring reports reporting the success or failure of the transplanting effort. These reports should be submitted to the Community Development Division no later than December 1st each monitoring year; (vi) if the seeding effort fails, the stored seeds and top soils can be taken out of long-term storage and sown in another location (either onsite or offsite) deemed suitable by CDFW. This seeding effort should then be monitored for an additional three-year period to ensure survivorship of the new population. Annual monitoring reports should be submitted to the Community Development Division no later than December 1st each year for the duration of the three-year monitoring period.

5. In lieu of the above prescribed mitigation, as allowed in writing by the County and/or CDFW, mitigation requirements may be satisfied via the purchase of qualified mitigation credits for the preservation of offsite habitat.

Implementation of (BIO-1) would reduce the project's impact on Diablo helianthella to a less than significant level.

Mitigation Measure (BIO-2): Adverse Effect on Other Special-Status Plants

Impact: The project site provides suitable habitat for special-status plant species, including Small-flowered monolopia, Bent-flowered fiddleneck, Mt. Diablo fairy lantern, and Fragrant fritillary. Future development activities within the project site could result in the loss of these species (if to occur during the spring months March through June). Surveys were conducted for special-status plants on the project site by M&A in the spring of 2011 and in September 2018. However, the 2011 Spring surveys need to be brought up to date to follow the CDFW's current survey protocol.

Mitigation Measures:

1. Thirty days prior to commencement of construction activities, tree removal or utility-related work, special-status plant surveys should be conducted in appropriate habitats during the spring (i.e., March through June) when Small-flowered monolopia, Bent-flowered fiddleneck, Mt Diablo fairy lantern and Fragrant fritillary are identifiable. The surveys should be in compliance with all CDFW (2018), USFWS (1996), and CNPS (2001) published survey guidelines.

2. If special-status plant species are confirmed to be present on the site during surveys, those individuals or populations should be avoided to the maximum degree possible. If avoidance is not feasible while otherwise obtaining the project's objectives, then other suitable measures and mitigation should be developed in consultation with the agencies that are responsible for protection of that plant species based on its protection status [i.e., the County (protected by CEQA), CDFW (protected by California law/regulation), or USFWS (protected by federal law/regulation)]. Appropriate mitigation prescriptions for impacts on special-status plants should be included as conditions of project approval as detailed below.

3. At least 30 days prior to commencement of construction activities, tree removal or utility-related work, the project proponent shall submit documentation of the survey in a report prepared by the project biologist. The report(s) shall include (i) the methods used, (ii) survey participants, and (iii) present the biologist's findings and recommendations. The report shall be subject to review and approval by the Community Development Division, who may require technical review by a qualified biologist. If the report provides adequate documentation that special-status plants that were the subject of the survey are not present on the project site, further evaluation of (BIO-2) impacts/mitigations are not required. However, if a special-status plant(s) is/are confirmed to be present on the site, the following mitigation measures shall also be implemented:

- To the extent practicable, areas where special status plants are present should be avoided. If avoidance is not practicable while otherwise obtaining the project's objectives, then other suitable measures and mitigation should be implemented as detailed below.

- At least 30 days prior to commencement of any construction activity or tree removal, the project biologist shall submit a compliance report to the Community Development Division. The compliance report shall detail the avoidance and other mitigation measures that have been implemented. (Note that the 2019 M&A report outlines a strategy for mitigation of project effects on State or federally-listed plants).

If any of the subject species of plant are confirmed to be present on the site, the following measures should be implemented:

- If avoidance is not feasible, a mitigation plan should be developed by a qualified botanist. If the plant is state listed, an incidental take permit (i.e., a Section 2081 Agreement) should be acquired for the project from CDFW prior to any grading within the project area. A copy of this permit should be provided to the appropriate department within the County prior to any grading within the project area. Any conditions for the project established by CDFW in the 2081 Agreement should become conditions of the project also enforceable by the County.

- If the plant is federally-listed (i.e., protected pursuant to the Federal Endangered Species Act), the project sponsor should formally notify the USFWS within five days of the finding and this agency's permitting instructions should be incorporated into the project conditions of approval. As required in-practice by the USFWS, an "incidental take" permit may be necessary from the USFWS for any proposed impacts on any federally listed plants found within the project site. A copy of this permit or a letter from the USFWS that otherwise states this agency is satisfied with the avoidance and/or mitigation measures should also be provided to the appropriate department at the County prior to the time the project site can be graded.

4. In lieu of the above prescribed mitigation, as allowed in writing by the County (for CEQA-protected species only) and/or CDFW (for CEQA and/or state listed species), mitigation requirements may be satisfied via the purchase of qualified mitigation credits or the preservation of offsite habitat. If the species in question is federally listed, then USFWS would also have to agree in writing typically through issuance of a Biological Opinion that the purchase of qualified mitigation credits or the preservation of offsite habitat would constitute satisfactory mitigation compensation.

Implementation of (BIO-2) would reduce impacts to special-status plant species to a level considered less than significant pursuant to CEQA.

Mitigation Measure (BIO-3): Nesting Raptors

Impact: Suitable nesting habitat for several raptor species occurs on the project site. Raptors (that is, birds of prey) are protected under the Federal Migratory Bird Treaty Act (50 CFR 10.13) and their active nest, eggs, and young are protected under California Fish and Game Code Sections 3503, 3503.5, 3800, and 3513. Any project-related impacts to any raptor species or their active nests would be considered a significant adverse impact pursuant to CEQA. Potential impacts to these species from the proposed project include loss of nesting habitat, disturbance to nesting birds, and possibly death of adults and/or young.

Mitigation Measures:

1. Within 30 days of commencing with tree removal or any construction work, if this work would commence between February 1st and August 31st, a raptor nesting survey shall be performed by a qualified biologist. The survey should include examination of all trees within 300 feet of the entire project site, not just trees slated for removal.

2. If nesting raptors are identified during the survey, a 300-foot radius around the nest tree must be delineated shall be fenced with temporary orange construction fencing (provided the tree is on the project site). If the tree is adjacent to the project site, then the buffer

should be demarcated per above only 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 raptors are well acclimated to disturbance. If this occurs, the raptor biologist should prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting raptors.

3. No tree removal or construction activity shall be allowed within the established buffer 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. This typically occurs by August 1st. This date may be earlier than August 1, or later, and would be determined by a qualified raptor biologist. The biologist shall provide details of the nesting outcome and the removal of buffers. The report shall be submitted to the County Zoning Administrator prior to removal of the buffer, if the date is before August 1st.

Implementation of (BIO-3) would reduce impacts to nesting raptors to a level considered less than significant.

Mitigation Measure (BIO-4): Nesting Passerine Birds

Impact: Nesting passerine (perching) birds, their eggs, and/or young could be impacted by the proposed project. Birds and their nests are protected under California Fish and Game Code (Sections 3503, 3503.5), and the Federal Migratory Bird Treaty Act.

Mitigation Measures:

1. Within 15 days of commencing tree removal or any construction work, if this work would commence between February 1st and August 31st, a nesting survey shall be conducted on the project site prior to any tree removal or construction.

2. If nesting passerine birds are identified during the survey, a 75-foot radius around the nest shall be delineated in the field using temporary bright orange construction fencing. If an active nest is found offsite, only the portion of the buffer that is onsite shall be fenced. No construction or earth-moving activity shall be allowed within this buffer until it is determined by a qualified ornithologist that the young have fledged and have attained sufficient flight skills to avoid project construction zone.

3. Many passerine bird species can complete nesting by mid-June to mid-July. Regardless, nesting buffers shall be maintained until August 1st unless a qualified ornithologist determines that young have fledged and are independent of their nests at an earlier date. If buffers are removed prior to August 1st, the qualified biologist conducting the nesting surveys should prepare a report that provides details of the nesting outcome and the removal of buffers. This report shall be submitted to the County Zoning Administrator

prior to removal of the buffer, if the date is before August 1st.

Implementation of (BIO-4) would reduce impacts to nesting passerine bird species to a level considered less than significant.

Mitigation Measure (BIO-5): Townsend's Big Eared Bat and Pallid Bat

Impact: Implementation of the project could impact Townsend big-eared bats and their habitat. Although the Townsend's big-eared bat and/or the pallid bat have not been confirmed to present on the project site, the onsite trees provide potential roosting habitat for these bat species. Additionally, the existing retaining walls along Oak Branch Way in the vicinity of Lot #5 may provide roosting habitat for the pallid bat, and the existing vacant homes on Lots #1 and 2 may provide bat roosting habitat. Both of these bat species are designated by the State as "species of special concern."

Mitigation Measures:

1. Within 15 days of commencing tree removal or any construction work, a qualified biologist shall survey the (i) vacant houses, (ii) onsite trees, and (iii) existing onsite retaining walls for roosting bats. CDFW maintains a list of personnel with such experience. If no Townsend's big-eared bat or pallid bats or any other special-status bat are found during the surveys, then there would be no further bat surveys shall be required.

2. If the survey confirms the presence of Townsend's big-eared, pallid bats or other special-status bat species on the project site, the biologist shall determine if young bats present.

3. If young special status bats are confirmed to be present, impacts to the house, tree or retaining wall shall be avoided until the young have reached independence. A non-disturbance buffer fenced with orange construction fencing should be established around the 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 confirmed to be roosting 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. Similarly, if adults were found to be roosting in one of the vacant houses or along the retaining wall, the adults could be flushed and netting or a similar cover material could be placed over the retaining wall/house opening to prevent the adults from returning to the roost site. No other mitigation compensation would be required.

Implementation of (BIO-5) would reduce the project's impact on the Townsend's big-eared bat and pallid bat to a level considered less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

b) *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?* **(Less than significant.)**

Monk & Associates (M&A) performed four surveys of the site during 2011 and they repeated a field survey in the fall of 2018. M&A characterize the plant community on the site as oak-bay woodland. Openings in the woodland canopy that allow sunlight to filter to the understory below has allowed for the development of a non-native annual grassland understory. The oak/bay woodland on the project site is dominated by coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), black oak (*Quercus kelloggii*), and California bay laurel (*Umbellularia californica*) trees with California buckeye (*Aesculus californica*) also present. This plant community is typically found in cooler and darker, north–facing slopes and narrow valleys, which is the case on the project site. The dense oak/bay tree canopy allows little sunlight to filter through the trees. The limited sunlight, in combination with the large amount of leaf litter that is deposited on the woodland floor, prevents the growth of well–developed shrubby and herbaceous understories in most locations on the project site. While the project site's shrub community is not well-developed, it is represented by several shrub and subshrub species including snowberry (*Symphoricarpus mollis*), poison oak (*Toxicodendron diversilobum*), California tea (*Rupertia physodes*), and infrequently, ocean spray (*Holodiscus discolor*). Vines such as pipevine (*Aristolochia californica*) and California honeysuckle (*Lonicera hispidula* var. *vacillans*) twine around the shrubs and hang off the cut/graded slopes. The herbaceous understory consists of shade–tolerant species such as ferns: western lady fern (*Athyrium filix-femina* var. *cyclosorum*), polypody fern (*Polypodium calirhiza*), California maidenhair fern (*Adiantum jordanii*), golden–backed fern (*Pentagramma triangularis*), and lilies: soap plant (*Chlorogalum pomeridianum*) and white globe lily (*Calochortus albus*). Where the canopy has openings allowing more sunlight to filter through the trees, herbaceous species such as small-flowered melic grass (*Melica imperfecta*), California figwort (*Scrophularia californica*), and bugle hedge-nettle (*Stachys ajugoides ajugoides*) are found. In summary, the biologic surveys confirm there is no riparian vegetation on the project site. Under existing conditions, site runoff is chiefly by sheet flow to the north. Ultimate, site runoff is conveyed to Las Trampas Creek, which passes approximately ½ mile north of the property. The biologic consultants characterize the vegetation as oak-bay woodland. The very low density housing on the site is expected to have a less than significant impact on distant riparian corridors.

c) *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?* **(No impact.)**

The site is a very steep, north-facing slope that lacks ponds, marshy areas and a drainage channels. There are no wetlands on site; therefore, the very low density housing proposed is expected to have no impact on federally protected wetlands.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

d) *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?* **(Less than significant.)**

Wildlife corridors are linear and/or regional habitats that provide connectivity to other natural vegetation communities within a landscape fractured by urbanization and other development. M&A concludes the project will not interfere with the movement of native wildlife. The project site fronts on the south side of King Drive. This street currently supports residences. To the south of the project site is another street with residences. M&A concludes that the project can be considered to be urban infill development, that is not expected to impact wildlife movement.

e) *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?* **(Less than significant.)**

Residential development at the density proposed is consistent with the County General Plan Land Use Element and prevailing P-1 zoning of the property. As described in Section b) above, the site is densely wooded. The approach to development of the site is based on use of retaining walls to minimize the footprint of grading. Nevertheless, loss of code-protected trees is required for construction of the planned roads improvements, driveways, turnarounds and building sites. The County has adopted a Tree Protection and Preservation Ordinance (tree ordinance), which allows removal and/or work within the dripline of code-protected trees needed for buildout of the project, with the approval of a tree permit. However, tree removal is required to be kept to a practical minimum, and restitution is required for those trees that are allowed to be removed. The project arborists, McNair & Associates (McNair) issued reports in 1998, 2009, 2018, and 2019. Additionally, arborist reports in the Community Development Division file for this project include three tree reports issued in 2002 by Reliable Tree Experts, along with a 2002 report issued by Tree Decisions. In 2002, a tree permit application (TP02-0008) was approved by the County in conjunction with the processing of a final development plan. At that time, Tree Permit #TP02-0008 allowed the removal of 112 code-protected trees; condition of approval #9 required the planting of 221 trees. To date, 68 trees have been removed due to the previous work on the subdivision improvements, and 3 trees have died. Forty-two more trees are proposed to be removed to complete the road realignment and final development of the properties, which will result in the ultimate removal of 113 trees. This amount is one more than what was originally evaluated and approved, and is therefore considered consistent with Tree Permit #TP02-0008, and will thus result in a less-than-significant impact.

As stated above, Tree Permit #TP02-0008 required that 221 trees be replanted as restitution for the trees approved to be removed. The 2019 McNair report concludes that is would not be practical (or desirable) to plant of replacement trees on the site, due to the already heavily wooded nature of the site. The trees to be removed include (i) dead and declining trees, (ii) trees with crowns within 10 ft. of the footprint of the residential foundations, (iii) tree species

classified as a pyrophytic (i.e. tree species known to ignite quickly and burn intensely), (iv) create a canopy separation between individual trees or limited size clusters of trees, and (v) prune to remove dead limbs and raise crowns to 8 ft. above grade (minimum). Due to these factors, the McNair report now recommends that only 25 trees be replanted. The approved Tree Permit #TP02-0008 will have to be amended to approve a reduced replanting requirement. The amended tree permit will also require that a security will be retained to assure proper protection of existing trees and replanting. Based on this analysis, and by implementation of the tree permitting requirements of the tree ordinance, the project would not conflict with any policies protecting trees, and therefore any impacts to trees is considered less than significant.

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

The project site is not subject to an adopted Habitat Conservation Plan or a Natural Community Conservation Plan. The site is designated Single Family Residential - Very Low Density (SV) by the Land Use Element of the General Plan, and is zoned P-1 (Planned Unit District). The adjacent lands to the north and south are developed. On that basis the project can be considered an infill project within an established suburban area.

Sources of Information

- Contra Costa County General Plan
- Project application materials and plans for County File #DP05-3058
- Monk & Associates, 2019, Biological Resource Analysis, King Estates Project, Contra Costa County, California
- McNair & Associates, 2019, King Drive Estates – Tree Replanting
- Project tree reports by McNair & Associates
- Contra Costa County HCP/NCCP Program

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

SUMMARY:

a) *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to California Environmental Quality Act Guidelines Section 15064.5?* **(Less than significant.)**

Figure 9-2 of the Open Space Element of the General Plan identifies the project site as an urbanized area that is not archeologically sensitive; notwithstanding, it does not exclude the potential for the occurrence of significant archeological resources. Due chiefly to the steep terrain, the potential for buried cultural resources is considered very low; therefore, project impacts will be less than significant.

b) *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to California Environmental Quality Act Guidelines Section 15064.5?* **(Less than significant.)**

The California CEQA Guidelines provision referenced encourages the lead agency to make provisions for the circumstance where a historical and/or unique archaeologic resource is inadvertently discovered during construction. Guideline section 15064.5(f) recommends that in this circumstance, construction work be halted in the immediate area of the "find" until a qualified archaeologist has had the opportunity of evaluate its significance (i.e. document the resource and provide recommendations to the lead agency for any mitigation that may be warranted). It is also acknowledged in the CEQA guidelines provision cited that construction work could be allowed continue on other parts lot/building site during the time gap between the initial discovery and the archaeologist's field visit/ significance evaluation. Given the steepness of the terrain, the volume of grading being proposed for subdivision improvements is very low. The project civil engineer estimates 3,131 cubic yards of cut and 2,040 cubic yards of fill to complete all subdivision improvements. Much of the area that will be the focus of this earthwork was previously graded (circa 2002-2003). At that time no cultural resources were observed by contractors working for the developer. Additionally, that earthwork was inspected by the staff of the Building Inspection Division, along with Public Works Department inspectors, and the County Peer Review Geologist. The features exposed during grading were limited to a relatively thin accumulation of native soils that were underlain by marine sedimentary rocks of Miocene age (chiefly sandstone). Furthermore, the Wilton Rancheria was solicited for comment on

August 15, 2019 regarding their interest in potential Native American resources on the project site, but no response or comment was received. Therefore, the project will have a less-than-significant impact on this analysis category.

c) *Would the project disturb any human remains, including those interred outside of formal cemeteries?* **(Less than significant.)**

As stated above, there is no surface manifestations of Native American habitation and/or use. Site terrain implies the potential for undiscovered remains is low. Nevertheless, there is a possibility that grading and trenching could expose human remains. The Wilton Rancheria was solicited for comment on August 15, 2019 regarding their interest in potential Native American resources on the project site, but no response or comment was received. Therefore, project impacts are less than significant.

Sources of Information

- Project application materials and plans for County File #DP05-3058
- Contra Costa County General Plan, Open Space Element
- State of California CEQA Guidelines (2019)
- County correspondence to the Wilton Rancheria, dated August 15, 2019

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

SUMMARY:

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

The application being processed is an amendment to a final development plan. This application is associated with an approved/recorded Final Subdivision Map for six (6) single-family lots. The development plan amendment is a regulatory process that does not require the consumption or expenditure of any energy resources, but rather involves discretionary approval through a public hearing process. The lots will be developed at an unknown future date, since the project currently does not propose any site development at this time. Future site development will most likely consist of activities such as tree removal, site clearing, building demolition, street improves, site grading, and home construction. It is reasonable to assume that the lots will either be developed at the same time or they may be developed by separate lot owners if sold individually over time. The construction phase of the project, including site grading and home construction, will require the use of electrical and petroleum-based fuel resources, but these impacts will be temporary in duration and are considered necessary for development of the site and not wasteful. Once the homes are constructed and occupied, energy consumption is anticipated be at a level consistent with other residential land uses. Furthermore, the California Code of Regulations, Title 24, Part 6, pertaining to energy-efficiency standards for residential (and non-residential) buildings will implemented for all residential building permits in order to assure that the latest energy-efficient technologies and methods will be incorporated in the construction of new homes at the site. Thus, project impacts to this analysis category will be less than significant.

b) *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?* **(No impact.)**

Locally, Contra Costa County adopted its Climate Action Plan (CAP) on December 15, 2015. The CAP outlines the County's strategy to address the challenges of climate change by reducing local greenhouse gas (GHG) emissions while improving community health. Additionally, the CAP meets the California Environmental Quality Act requirements for developing a qualified GHG reduction strategy, and is consistent with the Bay Area Air Quality Management District's (BAAQMD) guidance on preparing a qualified GHG reduction

strategy. The energy-efficiency requirements of Title 24 are supportive of the goals and policies of the CAP, and as discussed in section a) above, project construction will comply with the requirements of Title 24; therefore, there will not conflict with or obstruct any renewable-energy or energy-efficiency plans. No impact.

Sources of Information

- Project application materials and plans for County File #DP05-3058
- Contra Costa County Climate Action Plan
- California Code of Regulations, Title 24, Part 6

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
7. *GEOLOGY AND SOILS – Would the project:*				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) 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 on- or off-site 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 (1994), creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

SUMMARY:

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

i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?* **(Less than significant.)**

The California Geological Survey has delineated Alquist-Priolo (A-P) Earthquake Fault Zones along the known active faults in California. The nearest active fault is the Concord-Green Valley fault A-P zone, which passes approximately 5 miles northeast of the site. The A-P zones along the Calaveras and Hayward faults pass approximately 7¼ miles southeast and 8 miles southwest of the project site, respectively. The location of surface rupture generally can be assumed to be along an active major fault trace. The site is not within the A-P Zone. Therefore, the probability of the project site experiencing surface rupture can be considered very low.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

ii) Strong seismic ground shaking? **(Less than significant.)**

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

The Safety Element includes a figure titled "Seismic Ground Response". This map classifies the site as *lowest damage susceptibility* because the property is located in the outcrop belt of bedrock of pre-Pliocene age. The legend of this figure states that this risk assessment assumes foundation materials and critical slopes are stable. The risk of structural damage from earthquake ground shaking is controlled by building and grading regulation. The 2016 California Building Code (CBC) requires that building design takes into account both foundation conditions and proximity of active faults and their associated ground shaking characteristics. Design-level geotechnical reports must include CBC seismic parameters. Those parameters are used by the structural engineer in the design of structures that require building permits. In summary, to control risks associated with ground shaking effects, all structures must be designed using sound engineering judgment and comply with the seismic design standards of the latest edition of the California Building Code (CBC) and the County Grading Ordinance. Based on the preceding, the County Peer Review Geologist considers the hazard posed by earthquake ground shaking to be less than significant.

iii) Seismic-related ground failure, including liquefaction? **(Less than significant.)**

With regard to liquefaction potential, the Safety Element of the General Plan presents a hazard map that divides lands in the County into three liquefaction potential categories: "generally high," "generally moderate to low," and "generally low." It is used as a "screening criteria" during the processing of land development applications, on a project-by-project basis. The County has consistently required rigorous evaluation of liquefaction potential in areas rated generally high liquefaction potential, and qualitative investigations are demanded in the moderate to low category. Assessment of liquefaction potential is minimal for sites rated generally low liquefaction potential. The classification generally high liquefaction potential does not imply the presence of liquefiable sands on a parcel. The map attempts to be conservative of the side of safety. Where geologically recent fluvial deposits or sand bars could exist in the subsurface, the map places such areas in the generally high category. Site specific investigations are needed to determine if liquefiable sands are present and to provide stabilization measures where liquefiable sands are confirmed.

According to the liquefaction potential map in the Safety Element, the project site is classified generally low liquefaction potential. The County Peer Review Geologist has review a series of geotechnical reports that included boreholes, test pits and field geologic mapping. Those subsurface data points consistently indicate that the site is underlain by sedimentary rock of Miocene age (Briones Formation). This unit consists of erosion resistant intervals of very fine- to medium-grained sandstone, with some finer-grained intervals of non-erosion resistant siltstone, mudstone, and clayey, very fine-grained sandstone. The County peer review geologist, who reviewed the geotechnical reports submitted for the original subdivision and for the Final development plan as well as for the amended final development plan, concludes that the subsurface data consistently indicates a shallow depth to rock, and all rock was confirmed to be too well consolidated to present a risk of liquefaction. In effect the geotechnical reports triggered by the County support the findings of the Liquefaction Potential Map presented in the Safety Element, which indicates the liquefaction potential to be generally low. Therefore the potential for liquefaction is considered less than significant by the County peer review geologist.

iv) Landslides? **(Less than significant with mitigation.)**

In 1975 the USGS issued photo-interpretation maps of landslide and other surficial deposits of Contra Costa County. (That mapping is presented on Page 10-24 of the Safety Element of the County General Plan.) According to this map there are three drainage swales in the project site; one swale approximately coincides with the alignment of the lower segment of Oak Branch Way (between King Drive to its intersection with the driveway serving Lots #5 and 6); another other swale is partially on the northeast portion of Lot #4. As shown on the USGS map, this inferred landslide is located in the scenic easement, downslope of the Lot #4 driveway, and extends downslope onto an off-site parcel. Another drainage swale is indicated to be just east of Lot #6, but the western flank of this slide appears to extent to the easternmost boundary of Lot #6. Each of the drainage swales conveys surface runoff to the north (toward the channel of Las Trampas Creek). The map issued by the USGS shows small landslides in the uppermost portion of the all three drainage swales (The landslide mapped on the lower segment of Oak Branch Way is queried, indicating that the features used to identify the slide were weakly defined and could have an alternate interpretation.

It should be recognized that the landslide map presented in the Safety Element is based solely of photo-interpretation of historic aerial photographs, performed by an experienced USGS geologist (Nilsen, 1975). The interpretation shown did not have the benefit of a site visit or any subsurface data. Furthermore, landslides mapped are not classified on the basis of the (i) activity status (i.e. active or dormant), (ii) depth of slide plane (shallow or deep seated), or (iii) type of landslide deposit. Consequently, map is not a substitute for a detailed site-specific investigation. Nevertheless, the map fulfills its function, which is to red flag sites that may be at risk of landslide damage, where detailed geologic and geotechnical investigations are required to evaluate risks and develop measures to mitigate any potential hazards that are confirmed to be present. Based on the steepness of topography and mapping of suspected landslides that were

within and/or immediately adjacent to the site, the County peer review geologist considered landsliding and ground failure to be a potential hazard. Over the years a series of geotechnical reports were required to evaluate slope stability and foundation conditions.

The earliest geotechnical reports were utilized during the preparation of the Environmental Impact Report prepared for Subdivision 5187 and associated applications (RZ 2401-79 and DP 3081-79). At that time 11 lots were proposed on the project site, but not approved by the County. Approximately 10 years later, in 1989, applications were filed for approval of a Tentative Subdivision Map and associated Final development plan (SD 7267-89 & DP 3003-89). At that time the down-scoping of the development potential of the site (from 11 proposed lots to 7 lots) resulted in the filing of a Notice of Negative Declaration of Environmental Significance, and no additional geotechnical reports were triggered. Those applications were approved by the County Planning Commission but the approval was appealed, and ownership changes occurred. In 2001, revised plans were submitted that reduced the proposed lot yield to 6 lots and the Final development plan had been revised to address the 6 lot residential project on the site. Because the revisions reduced the lot yield, it was determined that the modifications being proposed did not create environmental impacts. However, the application was accompanied by geotechnical report prepared by Geostrata. The scope of the investigation included subsurface exploration, laboratory testing of samples, engineering analysis of the data gathered, along with geotechnical design recommendations for project. The Geostrata report was the basis for issuance of the grading permit G312058 in April 2001. Later in 2001 a "Stop Work Order" was issued by the Building Inspection Division (BID) due to a lack of staking. It was determined that the private road was not constructed in accordance with the approved plans for the project and earthwork was performed in deed restricted private open space. The lack of compliance with County regulations ultimately led the County Board of Supervisors to stop work for a "Violation of Subdivision Laws". There was no deficiency in the geotechnical report, but there was a failure by the developer to implement recommendations presented in the geotechnical report.

During the processing of Development Plan #DP05-3058, a series of geotechnical reports were required by the County. They addressed the subdivision improvements, slope stability, and evolution of the standard of care since preparation of the Geostrata report (issued in 1999). The reports submitted in support of the Amended Final Development report included the following: Hallenbeck/ Allwest Associates (2005, 2006), Allwest Geoscience, Inc. (2010) and most recently by Hallenbeck/ Allwest (2018). The 2018 report, titled "Master Engineering Geotechnical Engineering Report," addresses the currently proposed subdivision improvements, including reconstruction of Oak Branch Way improvements. Its scope included characterizing site geologic conditions, analysis of slope stability, and detailed geotechnical recommendations for construction of subdivision improvements, including (i) design of the pin walls to be used to support the proposed cut slopes, (ii) design of downslope retaining walls that are to be used to support the proposed fills on the outboard edge of Oak Branch Way, (iii) removal of existing improvements and placement of backfill, and (iv) backfilling of utility/ drainage trenches. Prior

to requesting building permits for retaining walls, a complete structural package will be required by the Building Inspection Division for review by their professional engineering staff.

Mitigation Measure (GEO-1): Slope Stability and Landslides

Impact: Natural slopes locally have gradients ranging up to 50 percent. The bedrock is sedimentary rock that is potentially subject to active mass wasting, particularly where slopes are (i) over-steepened, or (ii) where the bedrock is deeply weathered, highly jointed and/ or overlain by marginally stable colluvial deposits. Furthermore, the soils and clayey bedrock are known to be moderately expansive and may be corrosive. Reconnaissance mapping of the landslides by the U.S. Geological Survey (Nilsen, 1975) indicates three (3) suspected landslides that are within partially within the property. Investigations performed by the project geotechnical engineers clearly document there is no landslide within the Oak Branch Way corridor. However, a relatively small landslide was mapped in the southeast corner of Lot #3 (in a drainage swale that is proposed to be included in private open space). As mapped by the USGS, this slide extends to the offsite property located north of Lot #3). Another suspected slide mapped by the USGS is indicated just east of Lot #5 (but slide debris may extend into the easternmost flank of Lot #5). The subsurface data gathered to date was intended to characterize foundations conditions in the central portion of the building sites on Lots #3 and 5. This preliminary data established the existence of feasible building sites on each lot, but is not adequate to evaluate landslide risks or provide a recommended setback from the suspected slides mapped by the USGS, should a setback be deemed necessary. Additionally, there is a pervasive risk of slope creep, and any bare soils on the site would present a high erosion hazard.[1] In summary, the 2018 *Master Geotechnical Report* provides valuable background information on the building sites that was gathered by previous geotechnical investigations. That background information remains a valuable resource, but in the opining of the Peer Review Geologist, is not adequate for the issuance of construction permits on Lots #3 through 6.

Mitigation Measures:

1. At least 30 days prior to requesting a residential building permit, the developer shall submit a geotechnical / foundation report that is based on adequate subsurface data, laboratory testing and engineering analysis. The required report shall provide design-level recommendations (grading, drainage and foundation design). Additionally, the required investigations performed for Lots #3 and 6 shall evaluate potential landslide hazards. The investigations for those two reports are to include (i) an original geologic map of the parcel that provides data on rock type(s), orientation of dominant jointing and bedding, and maps the boundary of any potential

[1] Slope creep typically occurs on slopes underlain by expansive clays, and the downslope movement includes both lateral and vertical components. It is a slow process, typically involving a small fraction of an inch per year; however, this movement accumulates over the years and can result in several inches of lateral and vertical displacement over the life of improvements placed too near the creeping slope. Appropriately deep foundations are needed to control damage from slope creep.

hazardous areas that are confirmed to be present (i.e. landslide or marginally stable colluvial deposits), and provide recommendations to mitigate those adverse conditions.

2. The required residential geotechnical report(s) for Lots #3 through 6 shall be subject to review by the County Peer Review Geologist, and review/ approval of the Zoning Administrator. Improvement, grading, and building plans shall carry out the recommendations presented in the approved report.

Implementation of (GEO-1) would reduce the project's impacts to a level considered less than significant.

Mitigation Measure (GEO-2): Plan Review and Monitoring/Testing Services

Impact: The success of any hillside development project requires proper implementation of the geotechnical recommendations. A critical first step is review of construction drawings by the geotechnical engineer to ensure the design recommendations have been properly interpreted by the developer and their consulting team. Additionally, geotechnical and engineering geologic monitoring during the construction period is required to document that contractors have properly interpreted and implemented those recommendations.

Mitigation Measures:

1. Prior to the issuance of construction/grading permits, the project geotechnical engineer shall review grading, drainage and foundation plans for consistency with recommendations in the approved report. A letter that is wet signed and stamped by the geotechnical engineer shall identify the plans reviewed (complete bibliographic citation) and shall comment on grading, drainage and foundation plans, including foundation details. Additionally, the geotechnical engineer shall remind all parties of the need for geotechnical monitoring during construction, including foundation related work, and outline the points in the construction project when their observation and testing services are needed to ensure that all geotechnical recommendations are properly implemented. Such inspections also provide an opportunity for modifications in the field if exposed conditions deviate substantially from those that were the basis of the design recommendation. (Changes in the field do require written approval of the Building Inspection Division prior to their implementation.) The monitoring shall include geologic observation/ mapping of cut slopes and cut pads by the engineering geologist.

2. The project geotechnical engineer shall prepare a final report that documents the field observations and testing services provided during construction, including all mapping performed by the project engineering geologist. Additionally, the project geotechnical engineer shall provide a professional opinion on compliance of construction with the recommendations in the design-level geotechnical report. It is the opinion of the Peer Review Geologist that the final report can be segmented into an as-graded/as-built report that are

issued separately for Oak Branch Way improvements, and for each residence, on a parcel-by-parcel basis. To ensure submittal of the required documentation, the final grading inspection and submittal of building permits for the residences will not be accepted until each as-graded/as-built report is received and reviewed by the Peer Review Geologist.

Implementation (GEO-2) would reduce the impact from landslides/ground failure to a less-than-significant level.

b) *Would the project result in substantial soil erosion or the loss of topsoil?* **(Less than significant with mitigation.)**

According to the Soil Survey of Contra Costa County, the soil series mapped on the site consists of well-drained soils underlain by weathered, soft to firm, fine-grained sandstone and mudstone. The typical profile for these soils is 18 to 22 inches deep. The erosion potential is classified as moderate to high where the soil is bare.

Mitigation Measure (GEO-3): Erosion Control

Impact: During the grading and trenching, disturbed areas would expose bare soil and weathered rock, resulting in a potentially significant impact due to soil erosion. Consequently, the applicant is required to implement the following mitigation measure:

Mitigation Measure:

1. At least 30 days prior to the issuance of construction/grading permits, an erosion and sedimentation control plan that is in compliance with applicable construction period requirements of the State Water Resources Control Board and the San Francisco Bay Regional Water Quality Control Board shall be included in the submitted construction drawings, and implemented during construction.

Implementation of (GEO-3) would reduce the project's impacts to a level considered less than significant.

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

Implementation of (GEO-1) and (GEO-2) above will reduce impacts to this analysis category to less-than-significant levels.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

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

The Soil Survey of Contra Costa County considers the soil series on the site to be moderately expansive, and soils may be corrosive.

Mitigation Measure (GEO-4): Expansive and Corrosive Soils

Impact: Expansive soils expand when water is added and shrink when they dry out. This continuous change in soils volume causes structures to move unevenly and crack. Corrosive soils tend to damage concrete and/or uncoated steel that is in contact with the ground. Thus, there is a potentially significant impact due to adverse soil conditions.

Mitigation Measure:

1. The geotechnical report required by (GEO-1) above shall include testing of samples by a certified laboratory for evaluations of these adverse soil conditions. The corrosion potential testing shall include samples collected from the A-, B- and C-horizons. Geotechnical design recommendations shall be provided for all adverse soil conditions that are confirmed to be present.

Implementation of (GEO-4) would reduce the project's impacts to a level considered less than significant.

e) *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?* **(No impact.)**

The project site is within the area served by the Central Contra Costa Sanitary District. No septic systems are proposed within the project.

f) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?* **(No impact.)**

No fossils or other unique geologic features were exposed during previous grading and trenching performed on the site. According to the County Peer Review geologist, the likelihood of significant fossil finds or unique geologic features being encountered during construction is considered to have no impact.

Sources of Information

- Project application materials and plans for County File #DP05-3058

- Contra Cost General Plan, Safety Element
- State of California, CEQA Guidelines (2019)
- Graymer, R., D.L. Jones & E.E. Brabb, 1994, Preliminary Geologic Map Emphasizing Bedrock Formations in Contra Costa County, California, U.S. Geological Survey Open File Report 94-622
- Nilsen, T.H., 1975. Preliminary Photointerpretation Map of Landslide and Other Surficial Deposits of the Walnut Creek 7.5-Minute Quadrangle, Contra Costa County, U.S. Geological Survey, Open File Map 75-277-55
- Aagaard, Blair, Boatwright, Garcia, Harris, Michael, Schwartz, and DeLeo, 2016, Earthquake Outlook for the San Francisco Bay Region, 2014-2043, USGS Fact Sheet 2016-3020, revised August 2016; ver. 1.1)
- Don Hillebrandt Associates,1977, Preliminary Geotechnical Engineering Studies for 11.2 Acre Site Area, Immediately South of King Drive, Walnut Creek, CA, DHA Job #336-1(report dated July 14, 1977)
- Herzog Associates, 1989, Geotechnical Evaluation, King Drive Subdivision, Walnut Creek, CA, HA Job #2700.1.0.1 (report dated June 7, 1989)
- Herzog Associates, 1989, Preliminary Geotechnical Report, King Drive Subdivision, Walnut Creek, California, HA Job #2700.1-0-1, (report dated September 18, 1989)
- Geostrata, 1999, Geotechnical Investigation, King Drive Development, Contra Costa, CA, Geostrata Job #543-1(report dated November 25, 1999)
- Geostrata, 2001, Plan Review, Lots 5 and 6, King Drive Development - Tract 7267, Contra Costa County, CA Geostrata Job # 543-1B, L10086 (report dated January 5, 2001)
- Hallenbeck/Allwest Associates, 2004. Pier Depth and Concrete Placement Observation , Proposed residence, Retaining Wall(s)and Driveway Abutment/Buttress, Lot 2 , King Drive subdivision, Contra Costa County, CA, H/A Job No. 02-0430GC (report dated October 25, 2004)
- Hallenbeck/Allwest Associates, 2004. Pier Depth and Concrete Placement Observation Lot 2, King Drive Subdivision Contra Costa County, California
- Hallenbeck/Allwest Associates, 2004, Geotechnical Review of Civil Plans including Design of Proposed Slopes Reinforcement on and below Lot 4 and Lot 3, King Drive Subdivision, King Estates, Contra Costa County, California (report dated November 3, 2004)
- Hallenbeck/Allwest Associates, 2005, Engineering Geologic Feasibility Evaluation, Lot 5, King Drive Subdivision, King Estates Contra Costa County, California, H/A Job No. 02-0430GC (report dated January 28, 2005)
- Hallenbeck/Allwest Associates, 2005, Pier Depth and Concrete Placement Observation, 27 Piers, Proposed Residence Lot 2 King Drive Subdivision Contra Costa County, California, H/A Job No. 02-0430GC (report dated January 12, 2005)
- Hallenbeck/Allwest Associates, 2005, Pier Depth and Concrete Placement Observation 10 Piers, Proposed Driveway Abutment/Buttress, Lot 2 King Drive Subdivision, Contra Costa County, California Job No. 02-0430GC (report dated February 8, 2005)

- Hallenbeck/Allwest Associates, 2005, Response to Contra Costa Building Inspection Department letter dated March 2 prepared by Abed Chowdhury, S.E. In Reference to Piers at Lot 2, King Drive Subdivision, Contra Costa County, California, Permit # 342582
- Hallenbeck/Allwest Associates, 2005, Geotechnical Engineering and Engineering Geologic Services, King Drive Subdivision, King Estates Contra Costa County, California, H/A Job No. 02-0430GC (report dated June 13, 2005)
- Hallenbeck/Allwest Associates, 2005, Engineering Geologic and Geotechnical Engineering Investigation including Design for Proposed Slope Reinforcement Portion of the Oak Branch Way Cutslope, Located Below Lot 4, King Drive Subdivision, King Estates, Contra Costa County, California, (report dated September 21, 2005)
- Hallenbeck/Allwest Associates, 2005. Geotechnical Engineer of Record Statement and Geotechnical Engineering and Engineering Geologic Services, King Drive Subdivision, King Estates Contra Costa County, California, H/A Job No. 02.0430GC (dated October 5, 2005)
- Hallenbeck/Allwest Associates, 2005, Supplemental Geotechnical Engineering Recommendations, Existing Cut Slope Along Oak Branch Way Less Than 20 Ft High, King Drive Subdivision, King Estates, Contra Costa County, California, (report dated October 18, 2005)
- Hallenbeck/Allwest Associates, 2006, Geotechnical Engineering Services, Proposed Retaining Walls, Oak Branch Way, King Drive Subdivision King Estates, Contra Costa County, California (report dated January 19, 2006)
- Allwest Geoscience, Inc., 2008, Geotechnical Engineering Statement, Slope Protection Lot #1 (#10 Oak Branch Way) to Lot #2 (#20 Oak Branch Way), King Estates, CCC Subdivision, Tract # 7267 (report dated March 12, 2008)
- Hallenbeck/ Allwest, 2018, Master Geotechnical Engineering Report, King Estates, DP05-3058, Subdivision TR 7267, APN 238-040-011 thru -016, Contra Costa County, CA, H/A Job #430 GP King Estates (report dated November 18, 2018)

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
8. *GREENHOUSE GAS EMISSIONS – Would the project:*				
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?	☐	☐	☒	☐

SUMMARY:

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

Greenhouse gas (GHG) emissions may have an effect on the atmosphere and climate by trapping heat in the atmosphere. GHGs are considered global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. The major GHGs that are released from human activity include carbon dioxide (CO2), methane (CH4), and nitrous oxides (NOx). The primary sources of GHGs produced by human activities are vehicles (including planes, trains, and automobiles), energy plants, and industrial and agricultural activities. Various modeling tools are available to estimate emissions based on the type of project. For example, CalEEMod is an emissions model that was released by the California Air Pollution Control Officers Association (CAPCOA). CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The model is a tool for quantifying air-quality impacts from land use projects throughout California. The model can be used for a variety of situations where an air-quality analysis is necessary or desirable, such as the preparation of CEQA documents. The model is free and may be downloaded at www.caleemod.com. Such an analysis is desirable for large-scale projects such as large-scale land development, mixed-use scenarios, and industrial and commercial projects. Due to the small-scale residential nature of the proposed project, an extensive emissions-modeling analysis was not pursued. Instead, the County has chosen to use the 2017 BAAQMD "screening criteria" to assist in the identification of potentially significant project impacts on air quality. These screening criterial provide a conservative indication of whether the proposed project could result in potentially significant air-quality impacts. The thresholds are as follows for single-family residential projects:

- NOX 325 Dwelling Units
- GHG 56 Dwelling Units
- Construction-Related ROG 114 Dwelling Units

In summary, the screening criteria indicate that the proposed development plan amendment and the eventual build-out of the 6-lot subdivision does not present a risk of significant air quality

impacts, and so rigorous evaluation of air quality effects is not needed. According to the screening criteria listed above, projects that create up to 55 dwelling units would probably not trigger quantitative evaluation of GHG emissions, so it stands to reason that this small 6-lot residential subdivision poses a less-than-significant impact in terms of GHG emissions. The proposed development plan amendment and road realignment is not a large-scale development project that will be a source of excessive GHG emissions. Future site development will most likely consist of activities such as tree removal, site clearing, building demolition, road realignment, site grading, and home construction. It is reasonable to assume that the lots will be developed at the same time, or they may be developed by separate lot owners, if sold individually over time. The construction phase of the project, including site grading and home construction, will require the use of petroleum-based fuel resources, but these impacts will be temporary in duration. Once the homes are constructed and occupied, GHG emissions are anticipated be at a level consistent with other residential land uses; residential uses are not categorizes as excessive emitters of GHGs. Due the these factors, the GHG emissions associated with the road realignment and eventual development and residential use of the subdivision are considered less than significant.

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

The Contra Costa County Board of Supervisors, in April 2012, directed the Department of Conservation and Development to prepare a Climate Action Plan (CAP) to address climate-change impacts in the unincorporated area by reducing GHG emissions. The CAP was adopted by the Board of Supervisors on December 15, 2015. The CAP outlines the County's strategy to address the challenges of climate change by reducing local GHG emissions while improving community health. Additionally, the CAP meets the California Environmental Quality Act requirements for developing a qualified GHG reduction strategy, and is consistent with the Bay Area Air Quality Management District's (BAAQMD) guidance on preparing a qualified GHG reduction strategy. A qualified reduction strategy provides CEQA tiering, or streamlining, benefits to subsequent development projects that are consistent with the CAP. The CAP outlines the County's efforts to address climate change, primarily by reducing local GHG emissions, while improving community health. This is accomplished by providing the scientific, regulatory, and public health framework for addressing climate change and GHGs at the local level. The CAP meets the California Environmental Quality Act requirements for developing a qualified GHG reduction strategy, and is consistent with the BAAQMD's guidance on preparing a qualified GHG reduction strategy. As stated above in the response to section a), the construction phase of the project is expected to be a source of short-term GHG emissions; these impacts will be temporary in duration. Once road realignment is completed and the homes are constructed and occupied, GHG emissions are anticipated be at a level consistent with other residential land uses. Thus, the project will not conflict with any plans or polices, such as the Contra Costa County Climate Action Plan, adopted to reduce such emissions.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Sources of Information

- Project application materials and plans for County File #DP05-3058
- Contra Costa County Climate Action Plan
- Contra Costa County General Plan Conservation Element
- Bay Area Air Quality Management District website: www.baaqmd.gov
- www.caleemod.com

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
9. HAZARDS AND HAZARDOUS MATERIALS – *Would the project:*				
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 65962.5 and, as a result, would 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 or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

SUMMARY:

a) *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?* **(Less than significant.)**

The application is a request for amendment to a final development plan. If approved, the construction that would be allowed includes the construction of subdivision improvements, such as the regrading and realignment of the lower segment of Oak Branch Way, construction of retaining walls, utility trenches, and storm drainage facilities. Upon completion of subdivision improvements, there are four vacant lots on the site that will be available for construction of residences upon the issuance of construction permits. The ongoing transport, use, or disposal of hazardous materials is not proposed and will not occur, such as in the case of heavy industrial land uses like petroleum refining or manufacturing, or as in the case of heavy agricultural land uses. Materials common to construction sites will be used. During the grading and home construction phases of the project, it is anticipated that there will be the use of hazardous materials, such as vehicle fuel, engine fluids, lubricants, etc., as well as emissions from the construction vehicles, but since the construction phase will be temporary in duration, the impact will be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

b) *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?* **(Less than significant.)**

The proposed project involves construction of subdivision improvements, and those improvements will enable construction of single-family residences on Lots 3 thru 6; Lots 1 and 2 were previously constructed but never occupied. The construction of subdivision improvements and four future residences and long-term residential use involves use of limited quantities of hazardous materials. The construction period is short, and over the long-term, the quantities of hazardous material associated with residential land uses is not regarded as a significant impact.

c) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?* **(No impact.)**

There are no schools located within one-quarter mile of the site.

d) *Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?* **(No impact.)**

A review of State of California Hazardous Waste and Substance Site List ("Cortese list") indicates the project site is not listed.

e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?* **(No impact.)**

The nearest airport facility is the Buchanan Field Airport, which is approximately 5 miles north-northeast of the project site. The airport influence area is delineated in the Contra Costa County Airport Land Use Compatibility Plan. The project site is not within the Buchanan Field influence area, and not within an airport safety zone. Due to distance of the airport, excessive noise associated with airport operations would not present an impact to residents of the project.

f) *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?* **(No impact.)**

The site is located within an established residential neighborhood. The internal road in the project site provides access to King Drive. The King Estates development consists of six legally

established residential lots on an approximately 11.2-acre site. It represents in-fill development, that is situated near the upslope terminus of King Drive. Based on its location, it will not interfere with existing downslope residents exiting the neighborhood by heading south to Olympic Boulevard, the nearby collector street that would be used by residents in the event of an emergency.

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

The site is within the urban area of the County, which is served by the Contra Costa County Consolidated Fire Protection District. The Fire Code specifies minimum standards for emergency vehicle access, (i.e. grades, road widths, turnarounds and clearance), along with requirements to ensure adequate water supply for firefighting. Additionally, there are provisions of the California Building Code and Uniform Fire Code pertaining to the use of fire-retardant building materials and systems. Therefore, such impacts to this analysis category are less than significant.

Sources of Information

- Project application materials and plans for County File #DP05-3058
- Contra Costa County General Plan, Public Facilities/Services Element
- State of California Department of Toxic Substances Control's Hazardous Waste and Substance List – Site Cleanup (Cortese List)
- Contra Costa County Airport Land Use Compatibility Plan
- Department of Conservation and Development, Accela GIS
- 2019 California Building Standards Code

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

SUMMARY:

a) *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?* **(No impact.)**

The subject of the amended final development plan is a recorded six-lot residential subdivision. There are existing residences on two of the lots in the project area, along with four vacant lots. A Stormwater Control Plan (SWCP) is currently required if the resulting project may result in a total amount of impervious surface area exceeding 10,000 square feet. However, the lots were legally established prior to enactment of regulations requiring a SWCP. On that basis the project can be considered to be in compliance with water quality standards of the Regional Water Quality Control Board and with water quality requirements of Contra Costa County.

b) *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?* **(Less than significant.)**

The Land Use Element of the General Plan designates the site single-family residential, very low density (SV). The site is very steep (30-50%), underlain by low permeability bedrock at shallow depth. Under existing conditions runoff is rapid. Consequently, the project is expected to have a negligible effect on aquifer recharge. The domestic water service to the project will be provided by the East Bay Municipal Utility District. There are no water wells on the site and none are proposed.

c) *Would the project substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

There are no creek channels on the site, and no changes to drainage patters are proposed.

i) *Result in substantial erosion or siltation on- or off-site?* **(Less than significant.)**

Although the property is very steep, the footprint of grading is minimized through the use of retaining walls. With regard to the construction period, an Erosion Control Plan will be required prior to issuance of the grading permit. This plan will be updated during the late summer, to address field conditions at the end of the dry summer construction season. With regard to residential lots, roof gutter water is to be collected by downspouts and conveyed to closed conduits that will be connected to storm drainage facilities in King Drive or Oak Branch Way. In this manner, erosion and sedimentation will be kept to a practical minimum.

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

The Ordinance Code (Division 914) requires that all stormwater entering and/or originating on the property will be collected and conveyed, without diversion and with an adequate storm drainage system, to a an adequate natural watercourse having a definable bed and banks or to an existing adequate public storm drainage system which conveys stormwaters to an adequate natural watercourse. The hydrology and water quality effects of the project were previously evaluated during the processing of Development Plan #DP89-3003. The currently proposed amended final development plan has not modified site drainage. The storm drainage facilities previously installed prior to the work stoppage in the site in the early 2000s included storm drains within the Oak Branch Way road easement, and additional drainage-related improvements were installed in the Olympic Boulevard right-of-way. Under the proposed development plan, DP05-3058, Lots 1 and 2 drain to an existing storm drain system on King Drive, and Lot #6 will be required to construct additional onsite drainage facilities to connect to the existing storm drain system on King Drive. Lots 4 and 5 drain to an existing storm drain system on Oak Branch Way; Lot 3 is to drain to an outfall point on the slope below the Lot 3 building site and also into an existing storm drain line on Oak Branch Way. Thus, any such impacts are less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

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

The existing storm drainage facilities in King Drive and the downstream watershed have adequate capacity to convey runoff from the planned improvements on the site to the channel of Las Trampas Creek, so the impacts will remain less than significant.

iv) Impede or redirect flood flows? **(Less than significant.)**

There are no risks associated with the redirection of flood flows. The National Flood Insurance Rate Map (FIRM, Panel #290) designates the site Zone "X", which is defined as lands outside the 500-year flood plain, indicating little or no flooding potential.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? **(No Impact.)**

The only dam is the general vicinity of the site that drains to Las Trampas Creek is the dam constructed and owned by the East Bay Municipal Utility District (EBMUD) at the Lafayette Reservoir, located approximately 3 miles west of the project site. This dam falls under the jurisdiction of the State Department of Water Resources, Division of Safety of Dams. During the 1970s, the California Legislature enacted a law requiring the owners of dams to study their performance under earthquake shaking and to make any improvements that were needed. Concurrently, the dam owner was required to prepare inundation maps for each dam, assuming rapid total failure that was consistent with the type of construction of the dam. Although the Lafayette Reservoir has been found to provide an adequate level of safety, the inundation map is intended to assist in preparation of emergency plans by local and state agencies. A total of six sheets show the path of the reservoir waters as they make their way from Lafayette Reservoir to the outfall point of Walnut Creek into Suisun Bay. Sheet #2 indicates the extent of flooding in the Saranap area. No inundation is indicated for the King Drive neighborhood. In 2009, the California Emergency Management Agency issued tsunami inundation maps of the San Francisco Bay Region for a "tidal wave" (i.e. tsunami in the Pacific Ocean that passes through the Golden Gate and into San Francisco Bay, San Pablo Bay and ultimately extends up Carquinez Strait and into Suisun Bay and Honker Bay. According to this set of maps, the tsunami hazard in Contra Costa County is limited to the lowland areas immediately adjacent to these waterways. There is no tsunami hazard in the Central County area. Seiche is a water wave, normally in a standing body of water (lake, reservoir) resulting from a major landslide into the body of water. This hazard does not exist within the neighborhood that includes the project site. With regard to the mudslide hazard, Section 7—Geology and Soils of this Initial Study indicates a potential slope stability hazard may exists within drainage swales on portions

of Lots 3 and 6. The building sites are located outside of the area of influence of these drainage swales. Therefore, there are no impacts to this analysis category.

e) *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?* **(No impact.)**

The location on the project site is in the upper elevations of the Las Trampas Creek watershed, and would not restrict options for implementations of a water quality control plan or sustainable groundwater management plan.

Sources of Information

- Project application materials and plans for County File #DP05-3058
- Contra Costa County General Plan, Land Use Element
- MacNair & Associates, 2019, *King Estates – Tree Impact Assessment Arborist Report (dated March 2, 2019).*
- Public Works Department, 2018, *Development Permit DP05-3058, Staff Report and Conditions of Approval*
- California Emergency Management Agency, 2009, *Tsunami Inundation Map for Emergency Planning (*maps prepared for the following 7.5- Minute Quadrangles in Contra Costa County: Richmond, San Quentin, Mare Island, Benecia, Vine Hill and Honker Bay).
- FEMA

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

SUMMARY:

a) Would the project physically divide an established community? **(No impact.)**

The project is an in-fill development that is bounded on the south by the Rossmoor senior-living community, which is a senior housing development in the City of Walnut Creek. To the north of the project site is an established neighborhood of upscale dwellings of various ages, located in the unincorporated Saranap area of Contra Costa County.

b) Would the project cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? **(No impact.)**

The project is consistent with the Land Use Element of the County General Plan, which has designated the site "Single Family Residential Very Low Density" (SV), and with the provisions of the prevailing Planned Unit (P-1) zoning district. The application also requests an exception to the Subdivision Ordinance standard governing the design of private roads. Specifically, the Ordinance Code standard for private roads is a gradient not to exceed 20 percent, whereas the project proposes a portion of Oak Branch Way to exceed 20 percent. The Public Works Department has made findings to justify an exception to this requirement and has approved portions of the road to be steeper; and the Contra Costa County Consolidated Fire Protection District and has also indicated support for the proposed horizontal and vertical alignment of Oak Branch Way. The Public Works Department reviewed grading and drainage plans for the road as well.

Sources of Information

- Application, materials, and plans for County File #DP05-3058
- Contra Costa County Zoning Code (Title 8)
- Contra Costa County General Plan, Land Use Element

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
12. *MINERAL RESOURCES – Would the project:*				
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 of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

SUMMARY:

a) Would the project 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? **(No impact.)**

The California Department of Conservation has issued a report that classifies the mineral resource potential of lands in the San Francisco Bay Region (DMG Open File Report 96-03). According to that report, the site is in zone MRZ 1, which includes areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence. Nor does the Conservation Element of the General Plan indicate the site as being in an important mineral resource area.

b) Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? **(No impact.)**

The Conservation Element of the County General Plan identifies three areas of the County that contain significant deposits of mineral resources: (i) diabase, located in the Mt. Zion area, near Concord and Clayton (used in the construction industry); (ii) a quartzose sand deposit in the Byron area (utilized chiefly for making glass containers); and (iii) a clay deposit in the Port Costa area (historically used for making bricks, and later for making a low density aggregate). By 2010 the Port Costa operation closed and the property was acquired by the East Bay Regional Park District. The mining operations in the Mt. Zion and Byron areas are actively being quarried in compliance with existing land use permits, and their continued operation is important to the County and the region. In summary, there is no foreseeable potential for economic deposits of a mineral resource on the site. Moreover, the site is in-fill development within an established residential area.

Sources of Information

- Contra Costa County General Plan, Conservation Element
- California Division of Mines and Geology, 1996, Open File Report 96-03

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

SUMMARY:

a) *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?* **(Less than significant.)**

According to the Noise Element (Figure 11-5I), the site is not in an area impacted by noise levels greater than 60 decibels. The project will involve use of earthmoving equipment for grading and installation of underground utilities, but the volume of earthwork is very low (estimated by the project civil engineer to be 3,131cubic yards of cut and 2,040 cubic yards of fill) for subdivision improvements. Over the long term, noise levels will be characteristic of low density residential development. Because of the small size of the project (six lots) and the duration of the construction period will be relatively short, hence construction noise is not expected to be a significant impact if work hours are properly controlled. For in-fill projects land development projects within residential neighborhoods, it is standard practice to restrict constructions hours from 8 a.m. to 5 p.m., Monday through Friday, with no work allowed on weekends and federal holidays.

b) *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?* **(Less than significant.)**

No pile driving or deep dynamic compaction is proposed on the project site. Consequently, groundborne vibration and associated noise levels are anticipated to be less than significant.

c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?* **(No impact.)**

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

There are no airport facilities within 5 miles of the project site, and therefore aircraft-related noise will be negligible.

Sources of Information

- Contra Costa County General Plan: 2005-2020, Noise Element
- Application, materials, and plans for County File #DP05-3058
- Department of Conservation and Development, Accela GIS
- Contra Costa County Airport Land Use Compatibility Plan

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

SUMMARY:

a) Would the project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? **(Less than significant.)**

The amended development plan project will include construction of subdivision improvements (i.e., regrading and realignment of a portion of Oak Branch Way, two turnarounds, retaining walls, storm drainage facilities and utilities). The project is considered an in-fill residential project. Therefore, the proposed minor modifications to the existing 6-lot subdivision will not induce substantial population growth in the area beyond what was already approved. Thus, any impacts will be less than significant.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? **(No impact.)**

The project will not result in any displacement of people or existing housing.

Sources of Information

- Application, materials, and plans for County File #DP05-3058
- Contra Costa County General Plan, Housing Element

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

SUMMARY:

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

The application was referred to other departments and agencies for comment, including: a) the Contra Costa County Consolidated Fire Protection District; b) Saranap Homeowners Association; c) Central Contra Costa Sanitary District; d) EBMUD; e) Public Works Department; f) Building Inspection Division; and g) Sheriff's Department. The agency responses did not identify substantial adverse physical impacts associated with the provision of services. Rather, the comments identified routine requirements of the agencies (e.g., fire hydrants, compliance with the fire code, etc.).

a) *Fire Protection?* **(Less than significant.)**

The property is served by the Contra Costa Consolidated Fire Protection District. The thrust of those comments are that construction is subject to review of the District to ensure compliance with minimum requirements related to fire and life safety (e.g. compliance of road improvement standards of the Fire Code). The District is indicated that the road design is satisfactory as proposed, but will require field verification by District inspectors to verify that as-build conditions match those shown on the plans. It should be recognized that future residential construction on the site will require review and approval of the District (e.g. building plans to show an approved automatic fire sprinkler system; use of fire retardant roofing materials; adequacy of defensible space around the residences); and applicants are subject to payment of District fees for review of plans and field inspections to verify full compliance with regulations administered by the District.

b) *Police Protection?* **(Less than significant.)**

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Police protection services in the project vicinity are provided by the Contra Costa County Sheriff's Office, which provides patrol service to the unincorporated Saranap area. In addition to regular patrol service, the Sheriff's patrols originate in Martinez, approximately 9.5 miles northwest of the site). The additions of six residential lots would not significantly affect the provision of police services to the Saranap area. The project is not expected to create any unusual law enforcement problems. Thus, the potential impacts of the proposed project on police protection would be less than significant.

c) *Schools?* **(Less than significant.)**

The Walnut Creek School District (Park Meade School) and the Acalanes Union High School District (Los Lomas High School) provide public education services from kindergarten through 12th grade to students in the project vicinity. The proposed amended final development plan is a critical next step to toward buildout of the existing approved 6-lot subdivision. This residential project could add school-age children to local public schools; however, students from the project site would increase enrollment at any school by a negligible amount. Also, the applicant would be required to pay the state-mandated school impact fees for the each new dwelling unit. Thus, school impacts would be less than significant.

d) *Parks?* **(Less than significant.)**

There are neighborhood and community parks serving the project vicinity. Additionally, the City of Walnut Creek and East Bay Regional Park District provides major open space areas that provide hiking and riding trails. The small size of the project and anticipated population of the site is not expected to significantly increase demand by park-related services. In conjunction with the issuance of residential building permits the applicant is required to pay park dedication fees which represent mitigation of the project on park facilities.

e) Other public facilities? **(Less than significant.)**

Libraries: The Contra Costa Library operates 28 facilities in Contra Costa County. This library system is primarily funded by local property taxes, with additional revenue from inter-governmental sources. A portion of the property taxes on the project site would go to the Contra Costa Library system. Accordingly, the impact of the use of the public libraries by the proposed project, would be less than significant.

Health Facilities: The Contra Costa County Health Services Department (CCCHSD) operates a regional medical center (hospital) and 11 health centers and clinics in the County. County health facilities generally serve low income and uninsured patients. They strive to provide routine and preventative health care services, and prenatal and women's health services. CCCHSD is primarily funded by federal and state funding programs, with additional revenue from local

taxes, including a portion of the taxes on the project site. Thus, the impact of the use of public health facilities by the proposed project would be less than significant.

Sources of Information

- Application, materials, and plans for County File #DP05-3058
- Contra Costa County General Plan, Public Facilities/Services Element
- Project correspondence from utility and service providers

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
16. *RECREATION*				
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, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

SUMMARY:

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

Approval of the amended final development plan would allow construction of subdivision improvements (i.e. reconstruction and realignment of a portion of the private road, retaining wall construction along with storm drainage facilities and utilities). Ultimately, issuance of residential building permits for 4 new dwellings on the site (on Lots 3 through 6) and sale of the two exiting residences on Lots 1 and 2 that have never been occupied. Upon buildout of the King Estates project, the site will provide housing for six families, which represents a minor, cumulative increase in the use of parks. This effect of the project is mitigated by payment of park dedications fees at the time that residential building permits are issued. Additionally, it should be noted that a portion of property tax monies is used to fund park-related services (e.g. payment of bonds that have been approved by the voters to acquire, improve, and maintain parklands in Contra Costa County, and funding of local recreation districts).

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?* **(No impact.)**

The project does not include any public recreational facilities, and it does not require the construction or expansion of public recreational facilities. The proposed 6-lot residential development will have a minor cumulative impact on demand on existing park facilities. Given the proximity of neighborhood and community parks in the nearby Cities of Walnut Creek and Lafayette, and the regional trails of the East Bay Recreation Park District, it is anticipated that residents of King Estates would use these nearby facilities. As described above, incremental increase in the use of these public recreational facilities would not be expected to result in the need to construct or expand recreational facilities. Also see response to item 16.*a)* above.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Sources of Information

- Application, materials, and plans for County File #DP05-3058
- Contra Costa County General Plan, Public Facilities/Services Element

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

SUMMARY:

a) *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?* **(No impact.)**

Policy 4-c of the Growth Management Element of the General Plan requires a transportation impact analysis of any project that is estimated to generate 100 or more AM or PM peak-hour trips. The proposed project, at full buildout, would yield only the peak hour traffic generated by 6 single-family residences. Assuming one peak hour trip per lot, the project would yield 6 peak hour trips, which would not require traffic analysis. Traffic from 6 residences would not conflict with traffic policies.

b) *Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?* **(No impact.)**

Due to the small number of six residences, the project would not conflict with CEQA Guidelines Section 15064.3(b).

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

Only one new intersection is required for the project: the Oak Branch Way/King Drive intersection. To enter the site project, nearly all King Drive traffic will be making a right turn onto Oak Branch Way. There are only two residential lots on King Drive that are located east of the Oak Branch Way intersection, and King Drive is a dead end at its upper eastern terminus. Consequently, the volume of east bound traffic on King Drive through this new intersection will be extremely low. For vehicles exiting the site, the intersection will be stop-sign controlled for Oak Branch Way traffic. The primary hazard at this intersection is not sight distance, but rather it is a safety issue posed by the gradient of Oak Branch Way. This road possesses a gradient that locally is as steep as 25 percent. Failure of brakes for vehicles travelling down slope on Oak

Branch toward the King Drive intersection requires a properly engineered guard rail in the north site of the intersection. In recognition of the safety hazard, the proposed project includes a provision for construction of a heavy duty guard rail that has its posts anchored into bedrock. It should also be recognized that King Drive is a private road within a residential area that is narrow and winding. On a case-by-case basis, the County places restrictions on project-generated truck traffic hours. In this case, the intent of such restrictions would be focused on avoiding/minimizing conflicts between local traffic in the existing residential neighborhood and truck traffic associated with construction activities on the project site. So the impacts to this analysis category are less than significant.

d) *Would the project result in inadequate emergency access?* **(Less than significant.)**

The emergency access to the site has been reviewed by the County Public Works Department and by the Contra Costa Consolidated Fire Protection District. Both of these agencies have concluded that as currently proposed, Oak Branch Way will provide adequate emergency access.

Sources of Information

- Application, materials, and plans for County File #DP05-3058
- Correspondence from the Contra Costa County Consolidated Fire Protection District
- Correspondence from the Contra Costa County Public Works Department

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

SUMMARY:

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

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? **(Less than significant.)**

According to Figure 9-2 of the County General Plan, the site is located in an area that is considered to be urbanized. As noted in Section 5.*a-d,* the project site is a steep wooded hillside area, with no well defined watercourse. Because of its terrain, and because of the absence of known cultural resources in similar steep, wooded terrain in the vicinity, the project site is not considered to be a location with significant archaeological resources. Nevertheless, the County has sought to advise descendants of the tribal Indians that historically lived in Central Contra Costa County of the application being processed by the County. The purpose of the tribal consultation is to determine, as part of the CEQA review process, whether there are any known or inferred tribal resources on or near the project site. The Wilton Rancheria was solicited for comment on August 15, 2019 regarding their interest in potential Native American resources on the project site. No response or comment was received during the 30-day comment period, so project impacts will be less than significant.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? **(Less than significant.)**

See response to item a) above.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Sources of Information

- Letter to Wilton Rancheria from the Department of Conservation and Development, dated August 15, 2019
- Contra Costa County General Plan, Open Space Element

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

SUMMARY:

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

The project site is within the area served by the Central Contra Costa Sanitary District. The project does not require annexation. Previously CCCSD staff has provided comments on the project, indicating the on-site construction and connections to district mains will require (i) facilities be designed to comply with District standards, (ii) the district shall monitor construction to ensure compliance with their standards, and (iii) the developer is responsible for payment of district fees.

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

The project is within the area served by the East Bay Municipal Utility District (EBMUD). No annexation is required. At this point it is the responsibility of EBMUD to deliver water to all developed properties in the District. EBMUD has sufficient potable water to meet its obligations.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

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

The project site is within the Central Contra Costa Sanitary District (CCCSD). The project does not require annexations. Previous correspondence from the District has indicated that they can serve the project, but note that on-site facilities must be (i) in compliance with District standards, (ii) District construction inspectors will inspect on-site sewers during the construction period, and (iii) the applicant is subject to payment of applicable CCCSD fees. **(Less than significant.)**

d) *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?* **(Less than significant.)**

The project is served by the Republic Services Keller Canyon Landfill, located in the Bay Point Area. Adequate capacity exists in this landfill to accommodate the proposed project.

e) *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?* **(No impact.)**

The approved 6-lot residential subdivision will be required to comply with applicable federal, state, and local laws related to solid waste. The proposed project would not result in the generation of unique types of solid waste that would conflict with existing regulations applicable to solid waste. Thus, the project would not conflict with existing solid waste regulations.

Sources of Information

- Application, materials, and plans for County File #DP05-3058
- Department of Conservation and Development Accela GIS

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

SUMMARY:

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan? **(Less than significant.)**

With regard to emergency access to the site, the Public Works Department and the Contra Costa County Consolidated Fire Protection District have reviewed the horizontal and vertical alignment of Oak Branch Way, including the requirement to provide turnarounds for emergency vehicles, and have determined that the on-site private road and the design of the Oak Branch Way intersection with King Drive provides adequate emergency access to the project site from King Drive. With regard to evacuation plans, residents of the project would use the existing local road network to reach Olympic Boulevard. The King Estates project contains only six residences, and the added traffic on King Drive and the downhill road network would have a minor cumulative impact of traffic during evacuation, but the increase would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? **(Less than significant.)**

Because the project site is within an urban area protected by the Contra Costa Consolidated Fire Protection District, the risks of a major wildfire would appear to be relatively low due to the largely urbanized nature of the area. Furthermore, the future residences that may constructed on

the site will be required to comply with the standards of the California Building Code and Uniform Fire Code that are operative when residential building permits are requested, therefore there will be less-than-significant impacts in this analysis category.

c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?* **(Less than significant.)**

The project is served by the Contra Costa Consolidated Fire Protection District and has an urban level of services, is design with fire hydrants at locations selected by the Fire Protection District, and the access road has been review by the district and deemed to provide adequate emergency access; therefore any impacts will be less than significant.

d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?* **(Less than significant.)**

The project site is not located within an area subject to flooding. There are no watercourses on the site, and no change in drainage direction is proposed. The amended final development plan indicates that runoff from the impervious surfaces on Lots 1 through 5 will drain to a closed culvert system in the Oak Branch Way road easement, which is discharged into an existing culvert in the King Drive ease easement. Runoff from impervious surfaces on Lot 6 will be conveyed via a closed conduit to existing drainage facilities in the King Drive road easement. The drainage plan has been reviewed by the Public Works Department and the County Flood Control District staff. That review indicates that the proposed drainage system satisfies County requirements. Ultimately, runoff from the site is conveyed via culverts to the channel of Las Trampas Creek. With regard to erosion and slope stability, the site is underlain by rock at shallow depth (≤5 ft.). The geotechnical report issued by Geostrata (1999) recommended use of a 2:1 (horizontal to vertical) gradient for cut and fill slopes. Where this gradient was not consistent with project objectives, the report recommended use of retaining walls. Subsequently geotechnical reports have not disagreed with this recommended slope gradient. Moreover, the grading proposed by the amended final development plan has not recommended use of any 2:1 (h:v) cut or fill slopes. Instead, retaining walls are proposed as a means of limiting the footprint of the disturbed area and minimizing the loss of trees on the site. As a result, there is essentially no areas where bare soils will result from implementation of the proposed grading associated with the amended final development plan.

Sources of Information

- Application, materials, and plans for County File #DP05-3058
- Contra Costa County General Plan, Public Facilities/Services Element
- Uniform Fire Code
- 2019 California Building Standards Code

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
21. *MANDATORY FINDINGS OF SIGNIFICANCE*				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

SUMMARY:

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

Implementation of the proposed project would cause loss of oak-bay woodland habitat in the project site, and a loss of County-protected native trees. Implementation of the project would also result in impacts to common plant and animal species. The oak-bay woodland with its herbaceous understory may also be important for several special-status species such as Diablo helianthella and other special-status plants, special-status bats, and nesting birds. Mitigation measures prescribed in Section 4—Biological Resources above would reduce these impacts to less-than-significant levels.

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

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

The proposed project is to amend an existing final development plan. It involves the construction of subdivision improvements for a previously approved and recorded 6-lot residential subdivision. The cumulatively effects of the subdivision were previously evaluated. Therefore, the scope of the current project is limited to the construction of road improvements to realign the road centerline, retaining walls, utilities, and drainage facilities. In summary, the project related improvements are consistent with the existing surrounding low density, single-family residential neighborhood. The project would have a less-than-significant cumulative effect on the environment.

c) *Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?* **(Less than significant.)**

The project site is a steep, north-facing slope that has been classified as an oak-bay woodland by the project biologists. The proposed road improvement have been reviewed for safety by the Public Works Department, and the Contra Costa Consolidated Fire Protection District, and drainage plans have been review by the Flood Control District. These agencies have indicated that they are satisfied with the road improvement plans. Additionally, there have been numerous geotechnical investigations of the site over the last 30 years. Those investigations demonstrate there is a feasible building site on each lot, with adequate access. Additionally, a 2018 geotechnical investigation has provided design-level recommendations for the subdivision improvements. There is nothing in the project record that indicates the project will result in a hazard to humans.

REFERENCES

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

1. Application, materials, and plans for County File #DP05-3058
2. Contra Costa County General Plan
3. Contra Costa County Zoning Code (Title 8)
4. Department of Conservation and Development Accela GIS
5. 2016 Contra Costa County Important Farmlands Map (CA Dept. of Conservation)
6. United State Department of Agriculture, Soil Conservation Service, Soil Survey of Contra Costa County, California, dated 1973
7. Bay Area Air Quality Management District website (www.baaqmd.gov)
8. Environmental Protection Agency Nonattainment Data, (www3.epa.gov/airquality/greenbook/anayo_ca.html)
9. Air Resources Board website (ww2.arb.ca.gov)
10. Contra Costa County Climate Action Plan, adopted December 15, 2015
11. Contra Costa County Tree Permit #TP02-0008
12. Monk & Associates, Biological Resource Analysis, King Estates Project, Contra Costa County, California, dated March 5, 2019
13. McNair & Associates, King Drive Estates – Tree Replanting, dated June 4, 2019
14. Project tree reports by McNair & Associates
15. Contra Costa County HCP/NCCP Program
16. County correspondence to the Wilton Rancheria, Notice of Opportunity to Request Consultation, dated August 15, 2019
17. California Code of Regulations, Title 24, Part 6
18. Graymer, R., D.L. Jones & E.E. Brabb, 1994, Preliminary Geologic Map Emphasizing Bedrock Formations in Contra Costa County, California, U.S. Geological Survey Open File Report 94-622
19. Nilsen, T.H., 1975. Preliminary Photointerpretation Map of Landslide and Other Surficial Deposits of the Walnut Creek 7.5-Minute Quadrangle, Contra Costa County, U.S. Geological Survey, Open File Map 75-277-55
20. Aagaard, Blair, Boatwright, Garcia, Harris, Michael, Schwartz, and DeLeo, 2016, Earthquake Outlook for the San Francisco Bay Region, 2014-2043, USGS Fact Sheet 2016-3020, revised August 2016; ver. 1.1)
21. Don Hillebrandt Associates,1977, Preliminary Geotechnical Engineering Studies for 11.2 Acre Site Area, Immediately South of King Drive, Walnut Creek, CA, DHA Job #336-1(report dated July 14, 1977)
22. Herzog Associates, 1989, Geotechnical Evaluation, King Drive Subdivision, Walnut Creek, CA, HA Job #2700:1.0.1 (report dated June 7, 1989)
23. Herzog Associates, 1989, Preliminary Geotechnical Report, King Drive Subdivision, Walnut Creek, California, HA Job #2700.1-0-1, (report dated September 18, 1989)

24. Geostrata, 1999, Geotechnical Investigation, King Drive Development, Contra Costa, CA, Geostrata Job #543-1(report dated November 25, 1999)

25. Geostrata, 2001, Plan Review, Lots 5 and 6, King Drive Development - Tract 7267, Contra Costa County, CA Geostrata Job # 543-1B, L10086 (report dated January 5, 2001)

26. Hallenbeck/Allwest Associates, 2004. Pier Depth and Concrete Placement Observation , Proposed residence, Retaining Wall(s)and Driveway Abutment/Buttress, Lot 2 , King Drive subdivision, Contra Costa County, CA, H/A Job No. 02-0430GC (report dated October 25, 2004)

27. Hallenbeck/Allwest Associates, 2004. Pier Depth and Concrete Placement Observation Lot 2, King Drive Subdivision Contra Costa County, California

28. Hallenbeck/Allwest Associates, 2004, Geotechnical Review of Civil Plans including Design of Proposed Slopes Reinforcement on and below Lot 4 and Lot 3, King Drive Subdivision, King Estates, Contra Costa County, California (report dated November 3, 2004)

29. Hallenbeck/Allwest Associates, 2005, Engineering Geologic Feasibility Evaluation, Lot 5, King Drive Subdivision, King Estates Contra Costa County, California, H/A Job No. 02-0430GC (report dated January 28, 2005)

30. Hallenbeck/Allwest Associates, 2005, Pier Depth and Concrete Placement Observation, 27 Piers, Proposed Residence Lot 2 King Drive Subdivision Contra Costa County, California, H/A Job No. 02-0430GC (report dated January 12, 2005)

31. Hallenbeck/Allwest Associates, 2005, Pier Depth and Concrete Placement Observation 10 Piers, Proposed Driveway Abutment/Buttress, Lot 2 King Drive Subdivision, Contra Costa County, California Job No. 02-0430GC (report dated February 8, 2005)

32. Hallenbeck/Allwest Associates, 2005, Response to Contra Costa Building Inspection Department letter dated March 2 prepared by Abed Chowdhury, S.E. In Reference to Piers at Lot 2, King Drive Subdivision, Contra Costa County, California, Permit # 342582

33. Hallenbeck/Allwest Associates, 2005, Geotechnical Engineering and Engineering Geologic Services, King Drive Subdivision, King Estates Contra Costa County, California, H/A Job No. 02-0430GC (report dated June 13, 2005)

34. Hallenbeck/Allwest Associates, 2005, Engineering Geologic and Geotechnical Engineering Investigation including Design for Proposed Slope Reinforcement Portion of the Oak Branch Way Cutslope, Located Below Lot 4, King Drive Subdivision, King Estates, Contra Costa County, California, (report dated September 21, 2005)

35. Hallenbeck/Allwest Associates, 2005. Geotechnical Engineer of Record Statement and Geotechnical Engineering and Engineering Geologic Services, King Drive Subdivision, King Estates Contra Costa County, California, H/A Job No. 02.0430GC (dated October 5, 2005)

36. Hallenbeck/Allwest Associates, 2005, Supplemental Geotechnical Engineering Recommendations, Existing Cut Slope Along Oak Branch Way Less Than 20 Ft High, King Drive Subdivision, King Estates, Contra Costa County, California, (report dated October 18, 2005)

37. Hallenbeck/Allwest Associates, 2006, Geotechnical Engineering Services, Proposed Retaining Walls, Oak Branch Way, King Drive Subdivision King Estates, Contra Costa County, California (report dated January 19, 2006)

38. Allwest Geoscience, Inc., 2008, Geotechnical Engineering Statement, Slope Protection Lot #1 (#10 Oak Branch Way) to Lot #2 (#20 Oak Branch Way), King Estates, CCC Subdivision, Tract # 7267 (report dated March 12, 2008)

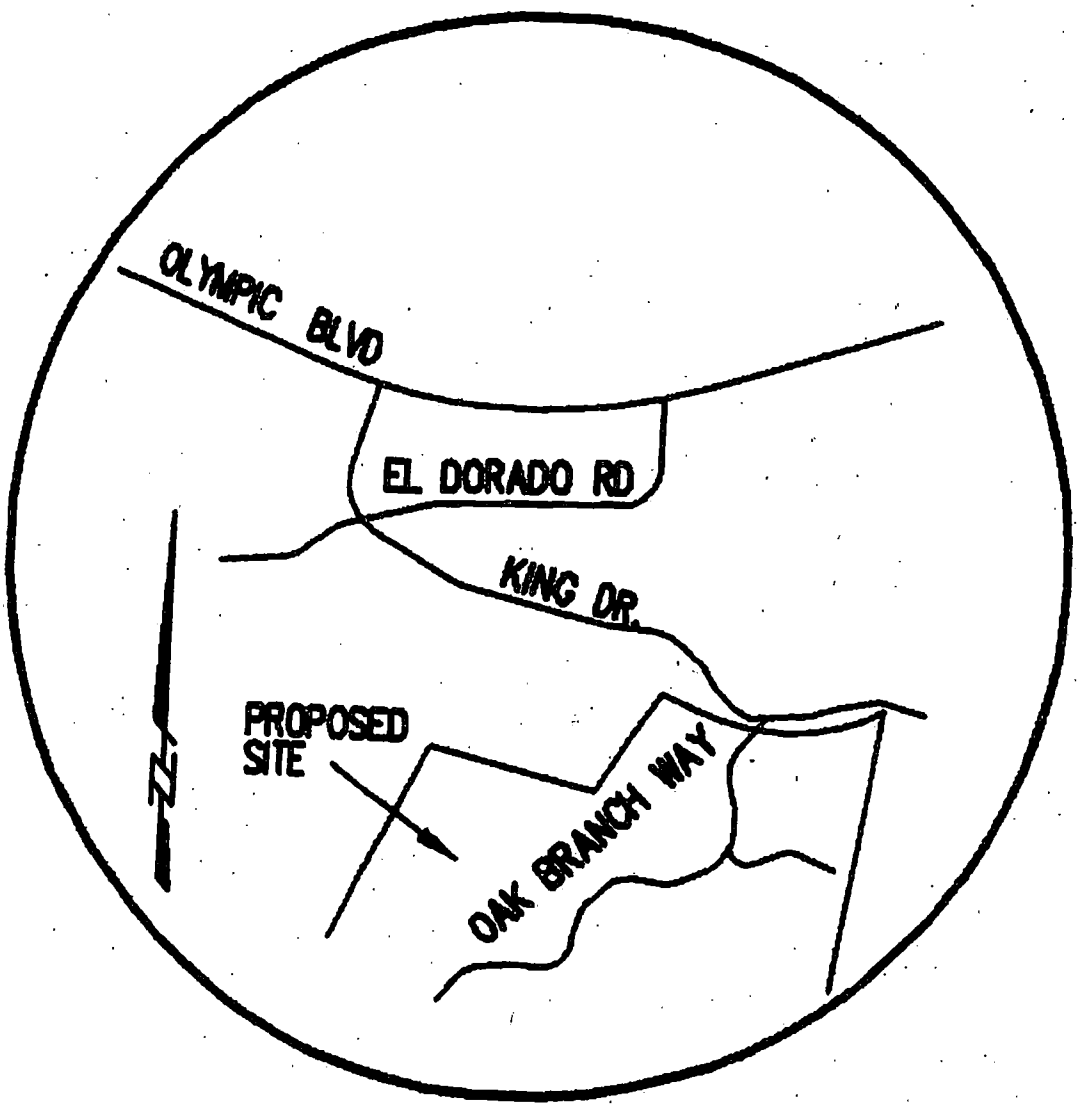
39. Hallenbeck/ Allwest, 2018, Master Geotechnical Engineering Report, King Estates, DP05-3058, Subdivision TR 7267, APN 238-040-011 thru -016, Contra Costa County, CA, H/A Job #430 GP King Estates (report dated November 18, 2018)

40. www.caleemod.com
41. State of California Department of Toxic Substances Control's Hazardous Waste and Substance List – Site Cleanup (Cortese List)
42. 2019 California Building Standards Code
43. Contra Costa County Airport Land Use Compatibility Plan
44. Public Works Department, 2018, Development Permit DP05-3058, Staff Report and Conditions of Approval
45. California Emergency Management Agency, 2009, Tsunami Inundation Map for Emergency Planning (maps prepared for the following 7.5- Minute Quadrangles in Contra Costa County: Richmond, San Quentin, Mare Island, Benecia, Vine Hill and Honker Bay)
46. FEMA website
47. California Division of Mines and Geology, 1996, Open File Report 96-03
48. Inter-agency and inter-departmental project correspondence and comments on project
49. Letter to Wilton Rancheria from the Department of Conservation and Development, dated August 15, 2019
50. Uniform Fire Code

ATTACHMENTS

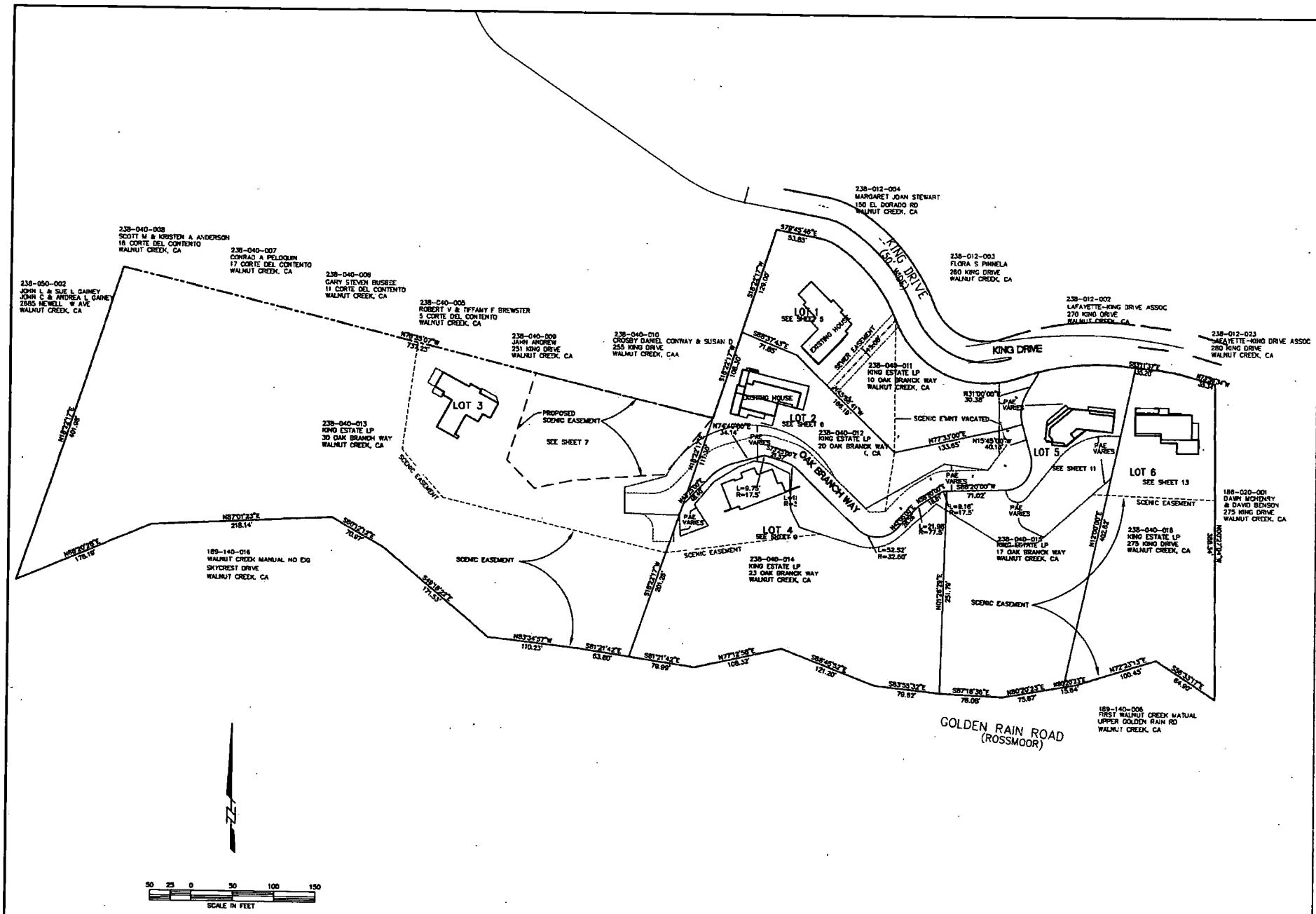
Project Site Plan for DP05-3058

WALNUT CREEK, CA 94595



VICINITY MAP

N.T.S.



DEVELOPMENT PLAN
-KING ESTATES
DP05-3058, TRACT 7267
WALNUT CREEK CALIFORNIA

DESIGNED:	STAFF
DRAWN:	G.N.
CHECKED:	RLC
SCALE:	1"=50'
DATE:	JUL 2019
SHEET NO.	2 OF 18
JOB NO.	769

DRAWING: C:\JOBS\769\769HC DATE: 07-09-2019 UDILevel 0 VPORT 99 LR AMEND.LSP