Leigh Creekside Park Master Plan Amendment Project

for the City of Lafayette

Initial Study and Appendices

February 2018

PLACEWORKS

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1. Introduction

This document is an Initial Study for the Leigh Creekside Park Master Plan Amendment project (proposed project) prepared by the City of Lafayette to determine if the project may have a significant effect on the environment. Pursuant to Section 15051 of the State CEQA Guidelines, the City is the Lead Agency for the proposed project.

The proposed project would adopt and implement the Leigh Creekside Park Amended Master Plan, which would re-define the project site as an active neighborhood park and divide the park into two designated areas; a passive area and active area. The passive area would include Americans with Disabilities Act (ADA) accessible pathways, picnic tables, benches, and natural surface areas. The proposed park's active area would include construction of new children's educational play structures; including boulders, paleontological themed climbing structures, log benches, and other historically themed play elements. There are no impervious surfaces currently on the project site, implementation and adoption of the proposed project would introduce a total of 1,586 square feet of impervious surface to the project site.[1]

1.1 REPORT ORGANIZATION

This initial Study is organized into the following chapters:

Chapter 1: Introduction. This chapter provides an introduction and overview of the Initial Study document.

Chapter 2: Initial Study Checklist. This chapter summarizes pertinent information for the proposed project, including the lead agency contact information, proposed project location, and General Plan and Zoning designations.

Chapter 3: Project Description. This chapter described the location and setting of the proposed project, along with its principal components, as well as a description of the policy setting and implementation process for the proposed project.

Chapter 4: Environmental Analysis and Findings. Making use of the CEQA Guidelines Appendix F, Energy Conservation, and Appendix G, Environmental Checklist, this chapter identifies and discusses anticipated impacts from the proposed project, providing substantiation of the findings made. The chapter concludes with the determination, based on the analysis contained in this Initial Study that an Environmental Impact Report (EIR) will be prepared for the proposed project.

[1] It should be noted that due to conceptual nature, irregular curves and natural materials, square footage and linear measurements throughout this document are close but still approximate.

Chapter 5: Organizations and Persons Consulted. This chapter presents a list of City, other agencies, and consultant team members that contributed to the preparation of the Initial Study.

2. Initial Study Checklist

1.	**Title:**	Leigh Creekside Park Master Plan Amendment Project
2.	**Lead Agency Name and Address:**	City of Lafayette Parks, Trails & Recreation Department 500 Saint Mary's Road Lafayette, CA 94549
3.	**Contact Person and Phone Number:**	Jonathan Katayanagi, Director (925) 284-2232
4.	**Location:**	Leigh Creekside Park Corner of 4th Street and Moraga Boulevard Lafayette, CA 94549
5.	**Applicant's Name and Address:**	City of Lafayette Parks, Trails & Recreation 500 Saint Mary's Road Lafayette, CA 94549 (925) 284-2232
6.	**General Plan Land Use Designations:**	Parkland
7.	**Zoning:**	R-6 (Single-family Residential District – 6)
8.	**Description of Project:**	See Project Description in Chapter 3
9.	**Surrounding Land Uses and Setting:**	See Project Description in Chapter 3
10.	**Other Required Approvals:**	See Project Description in Chapter 3

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, has consultation begun?:** The City of Lafayette has not received any request from any Tribe traditionally and culturally affiliated with the geographic area of the proposed project, or otherwise requested to be notified about projects in the City of Lafayette.

INITIAL STUDY CHECKLIST

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

❒ Aesthetics	❒ Agriculture & Forestry Resources	❒ Air Quality
❒ Biological Resources	❒ Cultural Resources	❒ Tribal Cultural Resources
❒ Geology & Soils	❒ Greenhouse Gas Emissions	❒ Hazards & Hazardous Materials
❒ Hydrology & Water Quality	❒ Land Use	❒ Mineral Resources
☑ Noise	❒ Population & Housing	❒ Public Services
❒ Recreation	❒ Transportation/Traffic	❒ Utilities & Service Systems
❒ Mandatory Findings of Significance		

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 City. 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 (EIR) will be prepared.

❒ 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.

Signature _____ Date _____

Printed Name _____ Title _____

3. Project Description

This Initial Study checklist was prepared to assess the environmental effects of adopting and implementing the Leigh Creekside Park Master Plan Amendment, herein referred to as the "proposed project" or "project." This Initial Study consists of a depiction of the existing environmental setting and the project description followed by a description of various environmental effects that may result from construction and operation of the proposed project. This Initial Study is a stand-alone document and in now way relies on any previously prepare environmental review for the proposed project. While no significant impacts are anticipated from the construction and operation of the proposed project as demonstrated in the Chapter 4, Environmental Analysis, of this Initial Study, to be conservative an Environmental Impact Report (EIR) to evaluate potential impacts related to noise will be prepared.

3.1 PROJECT SITE LOCATION AND SITE CHARACTERISTICS

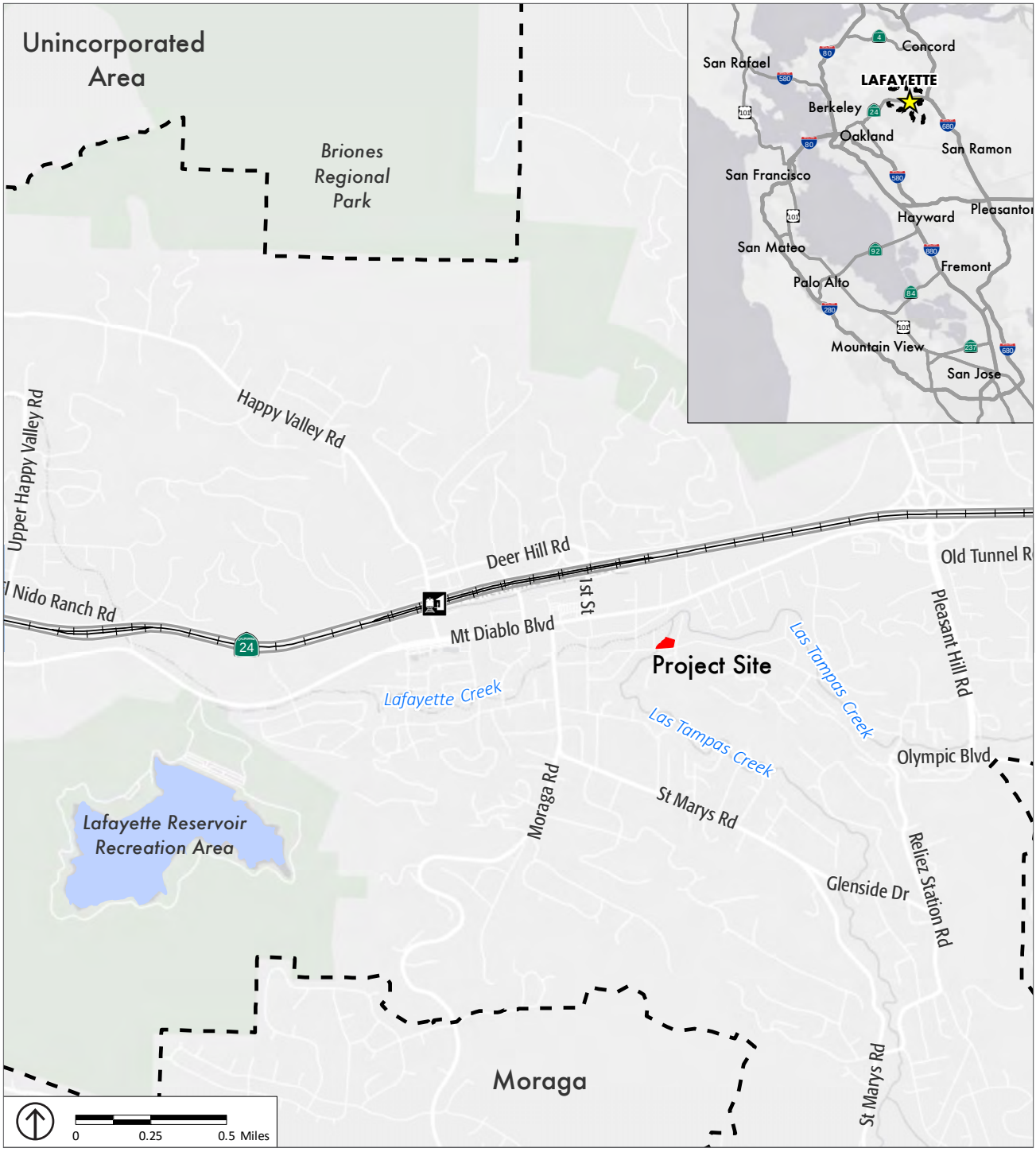
3.1.1 REGIONAL LOCATION

The project site is located in the City of Lafayette in Contra Costa County. Figure 3-1 shows the relationship of the project site to the City and Contra Costa County. The City of Lafayette is located 18 miles northeast of San Francisco and bordered by Briones Regional Park to the north, City of Walnut Creek to the east, City of Moraga to the south, and City of Orinda to the west.

Regional access to the project site is provided via State Route 24 (SR-24), Interstate 680 (I-680), County Connection bus service, and by Bay Area Rapid Transit (BART) via the Lafayette Station. Local access to the project site is provided by Mount Diablo Boulevardand Moraga Boulevard.

3.1.2 LOCAL SETTING

The project site is located on the corner of Moraga Boulevard and 4th Street within a single-family residential neighborhood. As shown on Figure 3-2, the site is bounded by residential housing to the north, 4th Street to the east, Moraga Boulevard to the south, and Las Trampas Creek to the west. The park is within walking distance to the Lafayette-Moraga Regional Trail which is operated by the East Bay Regional Parks District.



Source: PlaceWorks, 2016; ESRI 2015.

Project Site
BART Station
Railway
City Limit

Figure 3-1
Regional and Local Context

Source: PlaceWorks, 2016. Google Earth Pro., 2016.

0 400
Scale (Feet)

Approximate Project Site

Figure 3-2
Aerial of Project Site and Surrounding Area

3.1.3 EXISTING SITE CONDITIONS

The 0.6-acre site is assigned Assessor's Parcel Numbers (APNs) 233-051-36, -37, -38, -39, and -40. The project site is a neighborhood park and does not contain any lighting sources. The site is generally flat and developed with informal pervious pathways, two picnic tables, a drinking fountain, doggie pots,[1] and a split rail fence along the perimeter.

Vegetation on the project site includes native and non-native shrubs, trees, and riparian plants. The Las Trampas Creek can be viewed from the western portion of the site; however, access to the creek is prevented via signage and a split rail fence with wire mesh. There is a large Valley Oak tree (*Quercus lobata*) located in the northeast corner of the park which is considered a "protected" tree per the Lafayette Municipal Code (LMC) Chapter 6-17, Tree Protection.[2]

3.1.4 GENERAL PLAN AND ZONING DESIGNATION

3.1.4.1 GENERAL PLAN

The project site is designated as Parkland per the City's 2002 General Plan Use Map. The Parkland land use designation is primarily intended for existing and proposed active and passive parks, such as Lafayette Community Park, Brook Street Park, Leigh Creekside Park, and Mildred Lane Park.[3,4] Chapter IV, Parks, Trails & Recreation, of the Lafayette General Plan, generally describes the project site as a neighborhood park offering passive recreational uses that include the type of recreation or activity that does not require the use of organized play areas. In 2009, the City adopted a *Parks and Recreation Facilities Master Plan* that included an Addendum to the Lafayette General Plan EIR.[5] The *Parks and Recreation Facilities Master Plan* further defines passive recreational uses to include surfacing pathways, turf, ornamental and/or natural landscape, picnic tables, and quiet recreation such as chess. Existing conditions at the project site are based on the adopted *Leigh Creekside Park Master Plan*, included in this Initial Study as Appendix A, which define the project site as a passive neighborhood park.

3.1.4.2 ZONING

The project site is zoned Single-family Residential District – 6 (R-6). Per LMC Section 6-703,[6] the R-6 zoning district is reserved for detached single-family dwelling units on each lot and the accessory structure and uses normally auxiliary to it; crop and tree farming not including the raising or keeping of any animals other than ordinary household pets; publicly owned parks and playgrounds; a home occupation; and

[1] Doggie pots are places to get and dispose of plastic bags.
[2] Title 6, Planning and Land Use, Part 6, Subdivisions, Chapter 6-17, Tree Protection.
[3] City of Lafayette General Plan, 2009. Chapter I, Land Use, page I-7.
[4] City of Lafayette General Plan, 2009. Chapter IV, Parks, Trails and Recreation, page IV-3.
[5] City of Lafayette, 2009. *Addendum to Revised Draft EIR, Lafayette General Plan Revisions, For Lafayette Parks and Recreation Facilities Master Plan.*
[6] Title 6, Planning and Land Use, Part 3, Land Use Districts, Chapter 6-7, Single Family Residential Districts, Article 1, Single Family Residential District-6, Section 6-703, Uses Permitted.

animal farming consistent with LMC Chapter 6-5, Article 6, "Small Farm Animals," and supportive care pursuant to LMC Section 6-534.[7]

3.2 PROPOSED PROJECT COMPONENTS

Under the proposed project, the City of Lafayette Parks, Trails & Recreation Department is proposing to adopt and implement the proposed *Leigh Creekside Park Amended Master Plan*,[8] included in this Initial Study as Appendix B, which includes construction of new children's educational play structures at Leigh Creekside Park. Proposed project components are described in detail below.

3.2.1 LEIGH CREEKSIDE PARK AMENDED MASTER PLAN

The *Leigh Creekside Park Master Plan*, adopted on August 28, 2000, described the project site as a passive neighborhood park and included passive features such as picnic tables, a drinking fountain, and doggie pots. In 2015, the City Council hired James Dixon to prepare the *Leigh Creekside Park Amended Master Plan*, per recommendations from members of the public and the Lafayette Parks, Trails, & Recreation Commission, to introduce active play structures to the project site. The proposed project would re-define the project site as an active neighborhood park and divide the park into two designated areas; a passive area and active area. The passive area would include Americans with Disabilities Act (ADA) accessible pathways, picnic tables, benches, and natural surface areas. The proposed park's active area would include construction of new children's educational play structures; including boulders, paleontological themed climbing structures, log benches, and other historically themed play elements. Implementation and adoption of the proposed project would introduce a total of 1,586 square feet of impervious surface to the project site.

The proposed project outlines the following objectives to ensure that the passive and active uses within the project site are appropriately balanced:

- Provide a new park experience for all ages and abilities, with a focus on young children that reflects and interprets Lafayette's history.
- Make the park more accessible, more educational, more of a neighborhood park, and more enjoyable for all ages.
- Enhance the feeling of Lafayette as a community that is proud of its past and, because of that pride, is forward-thinking with a deep respect for nature, history, education, and knowledge.
- Preserve the passive, local use of the park while creating a designated, inviting, active space that focuses on Lafayette history.
- Address the change in demographics that has occurred over the past 15 years since the original master plan was adopted in 2000. The neighborhood now has more young families who seek

[7] Title 6, Planning and Land Use, Part 2, General Regulations, Chapter 6-5 General Provisions, Article 1, Miscellaneous, Section 6-534, Supportive Care Criteria.

[8] James Dixon Architect, 2017. *Leigh Creekside Park Amended Master Plan for the City of Lafayette.*

opportunities to socialize in a neighborhood park and to have a place where their children are fully engaged in memorable recreation activities.

- Provide a park where people with mobility issues as well as developmental disabilities can enjoy a variety of park amenities that appropriately match their capabilities and interests.
- Include a phased development plan that can guide incremental development with available funding and recreational/ educational desires expressed by the neighbors.
- Create a model park that showcases sustainability and no/low environmental impacts.

3.2.2 PARK IMPROVEMENT ELEMENTS

3.2.2.1 SITE PREPARATION AND CONSTRUCTION

There are no existing structures on the project site, thus, no demolition activities would occur. Overall, site preparation activities would generally be minimal and would not require extensive grading or excavation; however site preparation would require some leveling of the site to ensure flat surfaces and proper drainage in areas where the proposed structures would be located. The existing fence along the perimeter of the project site would be repaired to replace rotted posts, broken rails, and missing sections. Other site preparation activities would include the clearing, cutting, and removal of non-native vegetation in areas where construction would occur. The proposed project would not require trenching to connect to existing utility infrastructure, such as electricity and potable water. Two existing trees would be removed to accommodate the proposed play structures. These trees are considered protected per LMC Subsection 6-1702(q). Site preparation and construction of the proposed project could occur in phases depending on the availability of funding.

3.2.2.2 FENCING AND GATES

The existing cedar wood split rail fence along 4th Street and Moraga Road would be repaired. New wooden gates with metal frames and self closing hinges would be added to the primary entry points along 4th Street and Moraga Boulevard. The new gates would not exceed a height of 3 feet. No fencing is proposed on the northern property line.

3.2.2.3 PATHWAYS

The proposed project would include a total of 1,136 square feet (0.037 miles)[9] of impervious concrete pathway connecting the two active play areas located in the southern portion of the project site to the passive sitting areas in the center of the park and the main entrance. The impervious concrete pathways would be ADA accessible and the width would range from 4 feet to 6 feet.

[9] It should be noted that due to conceptual nature, irregular curves and natural materials, square footage and linear measurements throughout this document are close but still approximate.

3.2.2.4 LANDSCAPING

The proposed project would necessitate the removal of two existing native Incense Cedar (*Calocedrus decurrens*) trees, as shown on Figure 3-3.[10] Per LMC Subsection 6-1702(q), the two Incense Cedar trees proposed for removal are considered protected trees. Per City's Tree Protection typical replacement standard, two 15-gallon plantings would be required for each 6 inches of trunk diameter removed. Accordingly, a total of 13 replacement 15-gallon trees would be required.[11] Non-native vegetation within the proposed construction areas would be removed and any native vegetation necessitating removal would be relocated to another area within the project site. The existing lawn and lawn irrigation system would remain but would require modification to accommodate the new ADA path. However,under drought conditions, the City would allow the lawn to revert to natural dirt and leaf litter. The exterior faucet, located on the adjacent creek bank, outside the project area, would be retained.

[10] InsideOut Design, 2016. *Leigh Creekside Park Amended Master Plan*, September 28.
[11] InsideOut Design Inc., 2016. *Leigh Creekside Park Improvement Plan,* February 10.

PROJECT DESCRIPTION

Source: Leigh Creekside Park Amended Master Plan, 2016.

0 50
Scale (Feet)

● Exisitng tree to remain

✕ Exisitng Incense cedar tree to be removed

Figure 3-3
Tree Removal Plan

3.2.2.5 PROPOSED NEW STRUCTURES AND SITE FURNISHINGS

As shown on Figure 3-4, the passive areas would be located at the northeast corner of the project site, surrounding the heritage oak, and the southwest corner along Las Trampas Creek. The active play areas areas are located in the center of the park adjacent to the entrance along Moraga Boulevard. Each passive and active play area, and associated play structures are summarized below.

Passive Play Area

The passive play area on the project site would remain relatively undisturbed with only the addition of two new benches, one new picnic table, a relocated picnic table, and the pedestrian pathway, which would begin at the two main entrances of the project site along 4th Street and Moraga Boulevard providing access to both the active and passive areas. The passive play area would introduce a total of 95 square feet of impervious surface.

Saclan Acorn Grinding

As shown in Figure 3-5, this passive area includes a natural boulder with depressions so park visitors can experience a Native American grinding stone. A nearby accessible bench offers views of the park and the grinding rock. The passive educational play structures are ADA accessible and would be suitable for children ages 2 to 12 years old.

Active Play Area

The active area would contain educational play structures that incorporate elements that characterize different historical time periods. In total, the proposed new play structures and site furnishings would introduce 1,491square feet of impervious surface.

Saclan Time: Huts & Hunting

As shown on Figure 3-6, this area would include educational play structures that embody the City of Lafayette's rich Native American history. The Saclan Time: Huts and Hunting play area would contain a slide, a boulder for climbing with a bridge that would connect to a hunting observation platform, cargo net hammock for swaying, a rock wall with climbing nodules, and a log border. The active educational play structures would be ADA accessible and suitable for children ages 5 to 12 years old.

Pioneer Time: Lumber Wagon, Town Square, and Fall Zone 1

As shown on Figure 3-6, this area would include educational play structures that embody the City of Lafayette's pioneer history. This portion of the active play area would contain three designated play areas; Pioneer Time Lumber Wagon, Town Square, and Fall Zone 1. The Lumber Wagon is a multi-passenger see-saw on springs that would be customized to look like a pioneer lumber wagon. The Town Square play area would contain low "adobe" like walls for sitting, climbing, and imaginative play. The "adobe" wall would be made of concrete materials and adorned with period objects such as anvils, horseshoes, sacks of grain, and wooden boxes for imaginative play. The Fall Zone 1 would be coated with a 3- to 4-inch-thick

recreational pervious rubber safety surface to provide a safe play environment for visitors. The educational play structures would be suitable for children ages 5 to 12 years old.

Ice Age Time and Fall Zone 2

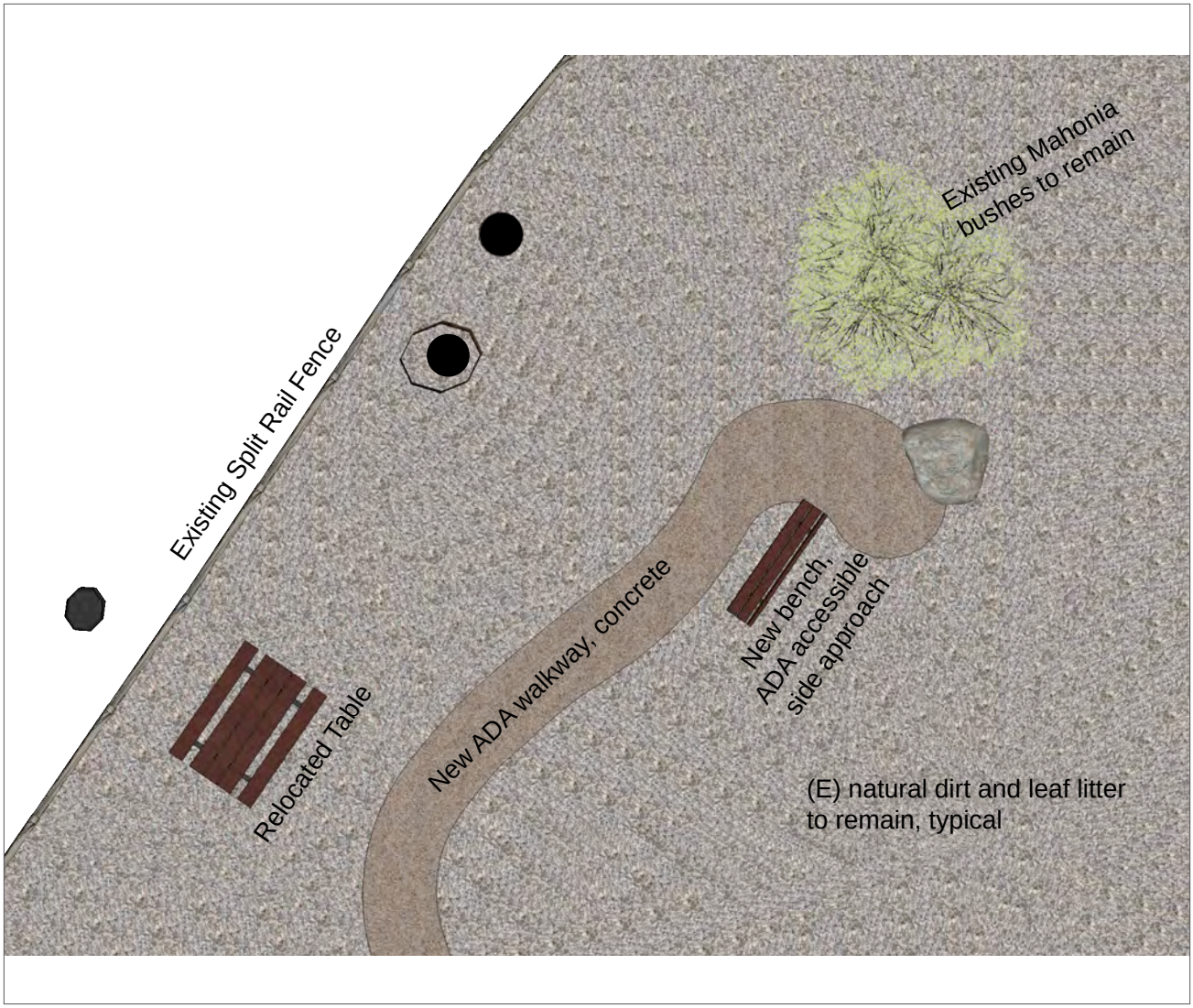
As shown on Figure 3-7, the Ice Age Play Area and Fall Zone 2, would include educational play structures that embody images associated with the ice age, a period of time in ancient history characterized by megafauna and colder temperatures. This portion of the active play area would contain an animal spring rocker, a spinning cup, and logs that can be used for seating, balancing and climbing. The educational play structures would be suitable for children ages 2 to 5 years old. The ground surface surrounding the play structures would be coated with a 3- to 4-inch-thick recreational pervious rubber safety surface to provide a safe play environment for visitors.

Source: Leigh Creekside Park Amended Master Plan, 2017.

0 50
Scale (Feet)

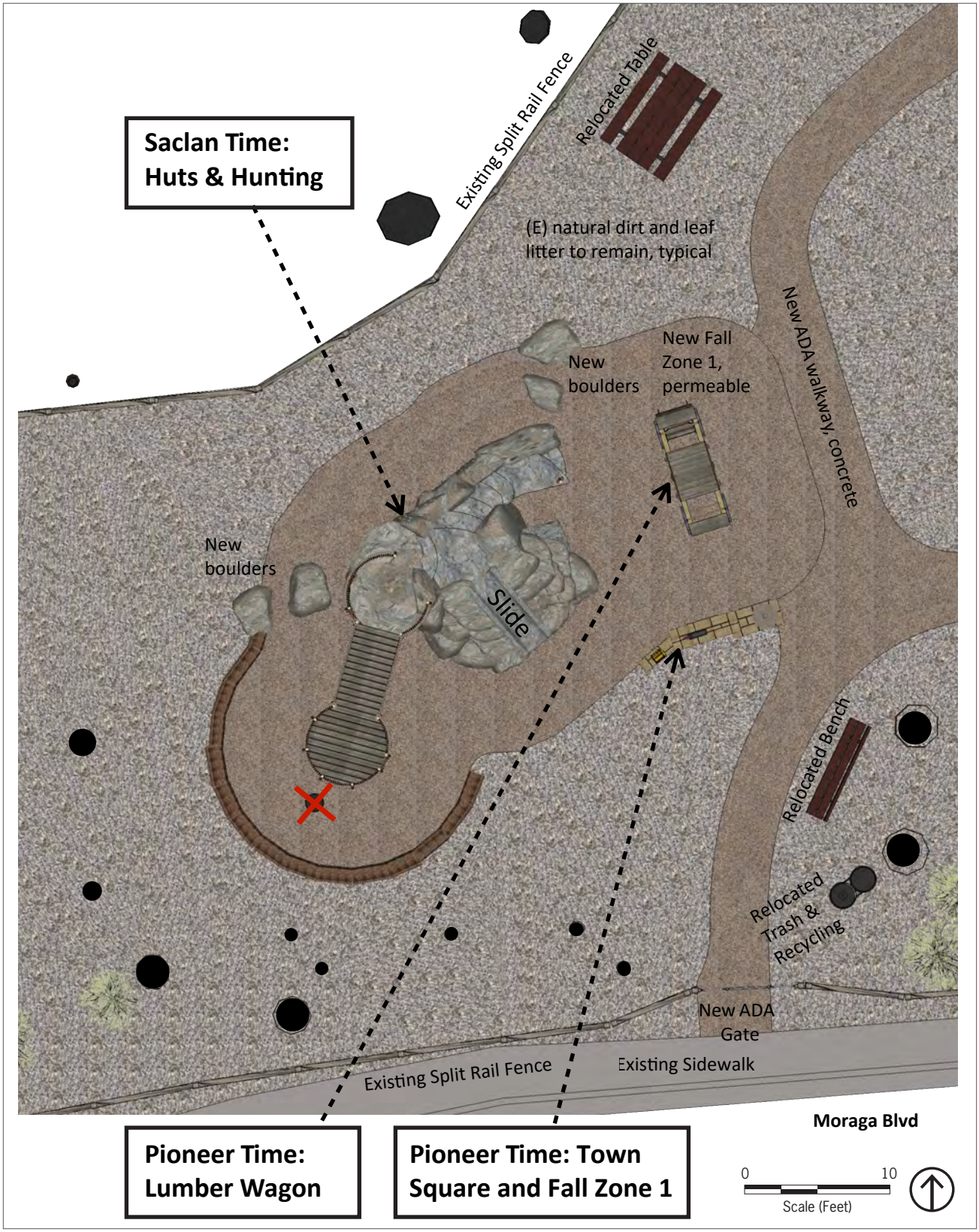
Active Play Area

Figure 3-4
Conceptual Site Plan



Source: Leigh Creekside Park Amended Master Plan, 2017.

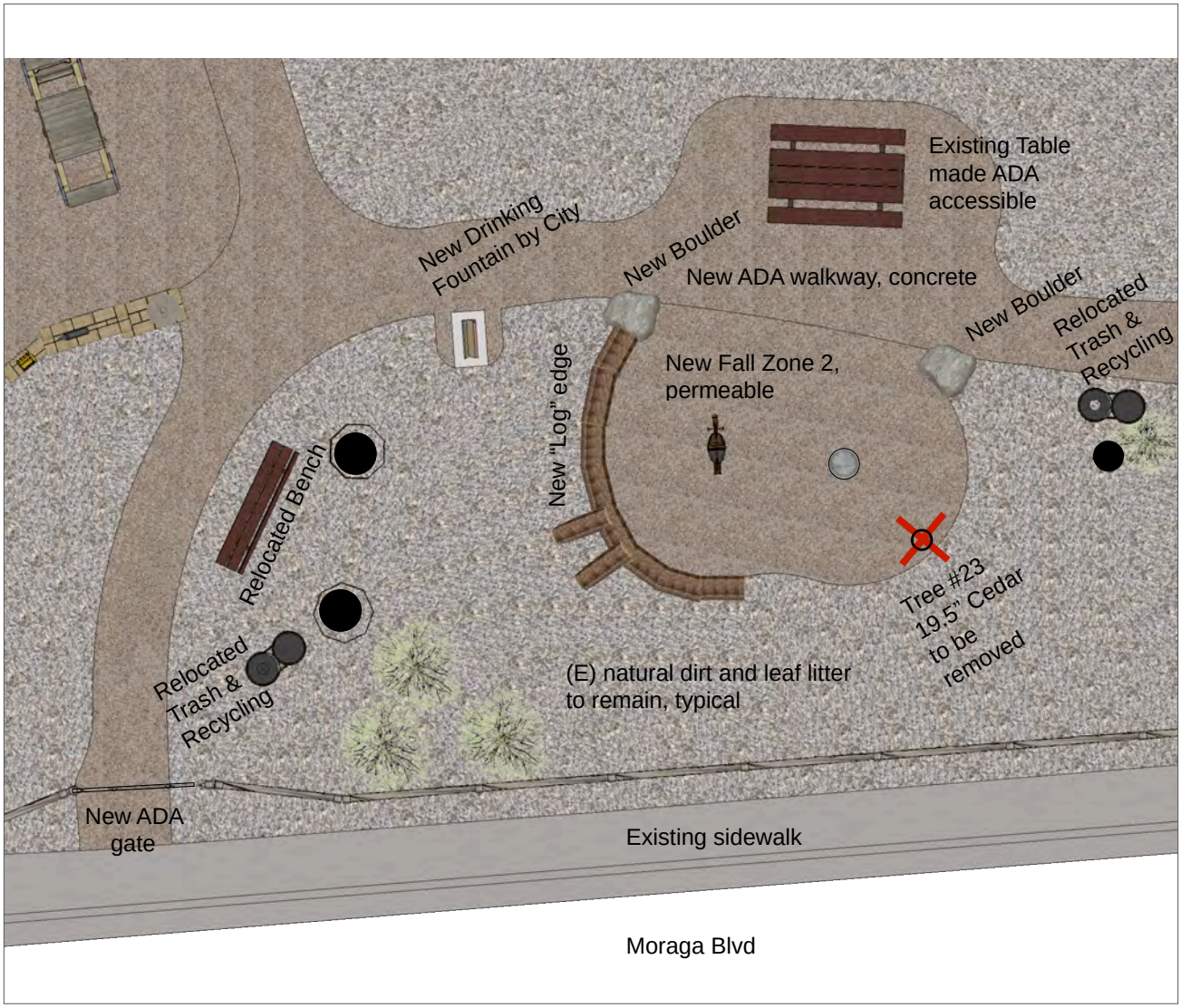
Figure 3-5
Saclan Acorn Grinding



Source: Leigh Creekside Park Amended Master Plan, 2017.

Figure 3-6
Saclan Time and Pioneer Time

PROJECT DESCRIPTION



Source: Leigh Creekside Park Amended Master Plan, 2017.

Figure 3-7
Ice Age Time

3.2.2.6 CIRCULATION AND SITE ACCESS

Vehicular and pedestrian access to the project site is provided along Moraga Boulevard, Foye Drive, and 4th Street. Pedestrian access to the project site would also be provided via the existing sidewalks and the Lafayette-Moraga Regional Trail.

3.2.2.7 UTILITIES

The project would retain existing connections to utilities already at the site including sewer and water. There are currently no sources of light at the project site and none are proposed as part of the project. Chapter 4, Environmental Analysis, of this Initial Study, provides a description of the regulatory setting and impacts to the service providers that serve the project site.

Water

The proposed project would be served by East Bay Municipal Utility District (EBMUD), which supplies water to the City of Lafayette. The project proposes to retain an ADA water fountain and existing hose bibb located on the creek bank, outside the project area. The existing lawn and lawn irrigation system would remain but would require modification to accommodate the new ADA path. However, under drought conditions, the City would allow the lawn to revert to natural dirt and leaf litter.

Electricity

The project site does not contain any lighting sources and does not propose to introduce any sources of light or connect to electrical service meters.

Stormwater Management

The proposed project would result in a net increase of 1,586 square feet of impervious surface to the project site. The project would be required to comply with the Contra Costa Clean Water Program (CCCWP) C.3 requirements, which include the minimization of impervious surfaces, measures to detain or infiltrate runoff from peak flows to match pre-development conditions, and agreements to ensure that the stormwater treatment and flow control facilities are maintained in perpetuity.

Solid Waste

The Central Contra Costa Solid Waste Authority (CCCSWA), a joint Powers Authority, oversees solid waste collection, disposal, and recycling in the City of Lafayette. Solid waste generated by the proposed project would be adequately handled by the current disposal schedule.

3.3 REQUIRED APPROVALS

The proposed project would require adoption of the *Leigh Creekside Park Amended Master Plan*, and certification of the EIR with supporting Initial Study. The City would also be responsible for issuing grading,

building, and tree permits as needed. Minor amendments to the Lafayette General Plan, the *Parks and Recreation Facilities Master Plan*, and *Leigh Creekside Park Master Plan* would also be required to re-designate the project site from a "passive" to an "active" neighborhood park in order to maintain consistency throughout all planning documents.

4. Environmental Analysis

4.1 DISCUSSION OF ENVIRONMENTAL EVALUATION

Items identified in each section of the environmental checklist below are discussed following that section. Required mitigation measures are identified where necessary to reduce a projected impact to a level that is determined to be less than significant.

The California Supreme Court in a December 2015 opinion (*California Building Industry Association [CBIA] v. Bay Area Air Quality Management District [BAAQMD]*, 62 Cal. 4th 369 [No. S 213478]), herein referred to as CBIA v. BAAQMD, confirmed that the California Environmental Quality Act (CEQA), with several specific exceptions, is concerned with the impacts of a project on the environment, and not the effects that the existing environment may have on a project. Therefore, the evaluation of the significance of project impacts under CEQA in the following sections listed below focuses on the impacts of the project on the environment, including whether the project may exacerbate any existing environmental hazards:

- Air Quality Criterion (d): Would the project expose sensitive receptors to substantial pollutant concentrations?
- Geology and Soils Criterion (a): Would the project expose people or structures to 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, mudslides or other similar hazards?
- Hazards and Hazardous Materials Criterion (d): Would the project be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?
- Hazards and Hazardous Materials Criterion (h): Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildland are adjacent to urbanized areas or where residences are intermixed with wildlands?
- Hydrology and Water Quality Criterion (g): Would the project place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
- Hydrology and Water Quality Criterion (i): Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
- Hydrology and Water Quality Criterion (j): Would the project potentially be inundated by seiche, tsunami, or mudflow?

- **Noise Criterion (a):** Would the project expose people to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or other applicable standards?
- **Noise Criterion (b):** Would the project expose people to or generate excessive groundborne vibration or ground borne noise levels?

Although the courts, as described above, have confirmed that CEQA is concerned about the project's impact on the environment and not the reverse, the City of Lafayette currently has policies that address impacts from existing conditions affecting existing and future development in the city. Accordingly, these policies are discussed below in Section 4.3, Environmental Analysis and Findings. This is consistent with one of the primary objectives of CEQA and this document, which is to provide objective information to decision makers and the public regarding a project as a whole. The CEQA Guidelines and the courts are clear that a CEQA document (e.g., EIR or Initial Study) can include information of interest even if such information is not an "environmental impact" as defined by CEQA. Therefore, where applicable, in addition to describing the impacts of the project on the environment, this chapter includes a discussion of issues that relate to City policies pertaining to impacts from existing conditions. Such examples include, but are not limited to, locating a project in a floodplain, a geologic hazard zone, or on/adjacent to sites involving hazardous substances.

4.2 SOURCES

In addition to the Technical Appendices, all documents cited in this analysis and used in its preparation are hereby incorporated by reference into this Initial Study. Copies of documents referenced herein are available for review at the City of Lafayette Planning Department, 3675 Mt. Diablo Boulevard, Suite 210, Lafayette, CA 94549.

4.3 ENVIRONMENTAL ANALYSIS AND FINDINGS

I. Aesthetics

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Have a substantial adverse effect on a scenic vista?	❒	❒	❒	■
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	❒	❒	❒	■
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	❒	❒	■	❒

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	❒	❒	❒	■

Existing Conditions

The project site is located on the corner of Moraga Boulevard and 4th Street within a single-family residential neighborhood. The 0.6-acre site is generally flat and developed with informal pervious pathways, two picnic tables, a drinking fountain, doggie pots,[1] and a split rail fence along the perimeter. As shown on Figure 3-2 in Chapter 3, Project Description, of this Initial Study, the site is surrounded by single-family residential to the north, east, south, and west. The project site is bordered by 4th Street to the east, Moraga Boulevard to the south, and Las Trampas Creek to the west.

Scenic corridors can be defined as an enclosed area of landscape, viewed as a single entity that includes the total field of vision visible from a specific point, or a series of points along a linear transportation route. Public view corridors are areas in which short-range, medium-range, and long-range views are available from publicly accessible viewpoints, such as from city streets. Scenic vistas are generally interpreted as long-range views of a specific scenic feature (e.g., open space lands, mountain ridges, bay, or ocean views). Public views are those which can be seen from vantage points that are publicly accessible, such as streets, freeways, parks, and vista points. These views are generally available to a greater number of persons than private views. Private views are those views that can be seen from vantage points located on private property. Private views are not necessarily considered to be impacted when interrupted by land uses on adjacent properties.

For the purposes of the aesthetic analysis in this Initial Study, the study area includes any scenic viewing corridor, entryway, or character area as defined by the City of Lafayette's General Plan and scenic highways as defined by the California Department of Transportation (Caltrans) that are adjacent to the project site or have publically accessible views to scenic resources that could be obstructed by the adoption and implementation of the proposed project.

The project site and surrounding area is not considered a scenic viewing corridor,[2] entryway, [3] or character area, [4] under the City of Lafayette General Plan. The nearest State-designated Scenic Highway, State Route 24 (SR-24) is located 0.5 miles north of the project site.

The project site does not contain any lighting sources and does not propose to introduce any sources of light.

[1] Doggie pots are places to get and dispose of plastic bags.
[2] City of Lafayette General Plan, Map I-5, Scenic View Corridor.
[3] City of Lafayette General Plan, Map I-2, Entryway.
[4] City of Lafayette General Plan, Map I-6, Character Area.

Discussion

a) Would the proposed project have a substantial adverse effect on a scenic vista?

The project site and surrounding area is not considered an entryway,[5] character area,[6] or scenic viewing corridor[7] under the City of Lafayette General Plan. Additionally, the project does not propose any structures that would be of a height that would obstruct or limit any views of surrounding land uses, scenic or otherwise. Therefore, *no impact* would occur and this issue will not be discussed in the EIR.

b) Would the proposed project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

The project site is not located in proximity to a State-designated scenic highway. The nearest State-designated scenic highway, SR-24, is located 0.5 miles north of the project site.[8] Due to the flat topography of the project site and its surroundings, the project site is not visible from this State scenic highway. Therefore, *no impact* would result in this respect and this issue will not be discussed in the EIR.

c) Would the proposed project substantially degrade the existing visual character or quality of the site and its surroundings?

As described above, the project site is developed with informal pervious pathways/trails, two picnic tables, a drinking fountain, and a split rail fence along the perimeter. The proposed project would remove non-native vegetation, repair the existing cedar wood split rail fence, and plant native shrubs to complement the existing natural setting of the project site. The proposed passive play area would include two new wood picnic tables to match the existing picnic tables on the project site. The proposed active play area includes design elements intended to complement the project sites' natural setting and proximity to Las Trampas Creek such as natural boulders, cargo net hammock, a pioneer lumber wagon, "adobe" like walls, and wooden boxes. In addition, the educational play structures would be coated with a neutral palette and be minimal in size so as to not impede the views across the project site nor detract from the natural setting. While the proposed project would represent a change to the existing visual character of the site, the proposed equipment would harmonize with the existing visual character of the project site by incorporating natural colors and elements. In addition, this type of development is consistent with the permitted uses and development standards outlined in LMC Section 6-703, R-6 zoning district,[9] which allows for playgrounds. Therefore, adoption and implementation of the proposed project would result in a *less-than-significant* impact and this issue will not be discussed in the EIR.

[5] City of Lafayette General Plan, Map I-2, Entryway.
[6] City of Lafayette General Plan, Map I-6, Character Area.
[7] City of Lafayette General Plan, Map I-5, Scenic View Corridor.
[8] California Scenic Highway Program, California Department of Transportation, http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/, accessed September 29, 2017.
[9] Title 6, Planning and Land Use, Part 3, Land Use Districts, Article 1, Single Family Residential District-6, Chapter 6, Section 6-703, Uses Permitted.

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

The project site does not contain any lighting sources and does not propose to introduce any sources of light. Accordingly, adoption and implementation of the proposed project would not result in substantial sources of light or glare that would adversely affect day or nighttime views in the area. Therefore, *no impact* would occur and this issue will not be discussed in the EIR.

II. Agriculture and Forestry Resources

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	❒	❒	❒	■
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	❒	❒	❒	■
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	❒	❒	❒	■
d) Result in the loss of forest land or conversion of forest land to non-forest use?	❒	❒	❒	■
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or of conversion of forest land to non-forest use?	❒	❒	❒	■

Existing Conditions

The project site serves as a neighborhood park offering passive recreational uses. The projects General Plan land use designation is Parkland. The Parkland land use designation is primarily intended for existing and proposed active and passive parks, such as Lafayette Community Park, Brook Street Park, Leigh Creekside Park, and Mildred Lane Park.[10,11] Maps prepared pursuant to the Department of Conservation's

[10] City of Lafayette General Plan, 2009. Chapter I, Land Use, page I-7.
[11] City of Lafayette General Plan, 2009. Chapter IV, Parks, Trails and Recreation, page IV-3.

Farmland Mapping and Monitoring Program categorize the project site as Rural Residential.[12] In addition, according to 2006 mapping data from the California Department of Forestry and Fire Protection, the city does not contain any woodland or forestland cover.[13]

Discussion

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

The project site is currently designated for park land uses by the Lafayette General Plan and is currently developed with a neighborhood park. The project site is classified as Rural Residential Land by the Department of Conservation's Farmland Mapping and Monitoring Program.[14] Accordingly, the proposed project would not convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance to non-agricultural use. Therefore, there would be *no impact*, and this issue will not be discussed in the EIR.

b) Would the proposed project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Neither the project site nor the immediately surrounding areas are subject to Williamson Act contracts.[15] Therefore, the proposed project would not conflict with existing zoning for agricultural use or Williamson Act contracts. Accordingly, there would be *no impact* and this issue will not be discussed in the EIR.

c) Would the proposed 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))?

Neither the project site nor the immediately surrounding areas feature zoning designations for forest land, timberland, or timber production.[16] Additionally, there are currently no lands within the City of Lafayette zoned for or currently featuring timberland or timber production.[17] The proposed project would therefore not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland. Accordingly, there would be *no impact* and this issue will not be discussed in the EIR.

[12] California Department of Conservation (DOC), Important Farmland Finder, http://maps.conservation.ca.gov/ciff/ciff.html, accessed September 29, 2017.

[13] California Department of Forestry and Fire Protection (CAL FIRE) Fire Resource Assessment Program (FRAP), Land Cover map, http://frap.fire.ca.gov/data/frapgismaps/pdfs/fvegwhr13b_map.pdf, accessed September 29, 2017.

[14] California Department of Conservation (DOC), Important Farmland Finder, http://maps.conservation.ca.gov/ciff/ciff.html, accessed September 29, 2017.

[15] Contra Costa County, 2012 Agricultural Preserves Map, http://www.co.contra-costa.ca.us/DocumentCenter/View/882, accessed September 29, 2017.

[16] City of Lafayette, Zoning Map, http://www.lovelafayette.org/home/showdocument?id=2381, accessed September 29, 2017.

[17] City of Lafayette, Zoning Map, http://www.lovelafayette.org/home/showdocument?id=2381, accessed September 29, 2017.

d) Would the proposed project result in the loss of forest land or conversion of forest land to non-forest use?

There is no forest land on the project site or in close proximity to the project site.[18] The project site and surrounding areas currently feature park land uses and single-family residential development. Therefore, the project would not result in the loss of forest land or conversion of forest land to non-forest use. Accordingly, there would be *no impact* and this issue will not be discussed in the EIR.

e) Would the proposed 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 or of conversion of forest land to non-forest use?

As detailed above, the project site and surrounding areas do not include any zoning, land use designations, or existing land uses relating to forest land, timber production, or agriculture. The project would not impact any outlying agricultural or forest lands and would not involve changes to the existing environment that would result in the conversion of forest or agricultural lands. Accordingly, there would be *no impact* and this issue will not be discussed in the EIR.

III. Air Quality

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

[18] California Department of Forestry and Fire Protection (CAL FIRE), Fire and Resource Assessment Program (FRAP), The Management Landscape, http://frap.fire.ca.gov/data/frapgismaps/pdfs/landscapesmap.pdf, accessed September 29, 2017.

Existing Conditions

The project site is a neighborhood park that primarily serves the surrounding residential area and does not include parking. Due to its location and size, the project site does not generate a substantial amount of long-term air pollutant emissions from the burning of fossil fuels in vehicles (mobile sources), energy use for cooling, heating, and cooking (energy), or landscape equipment use and consumer products (area sources). The 0.6-acre site is developed with informal pervious pathways, two picnic tables, a drinking fountain, doggie pots,[19] and a split rail fence along the perimeter. There are no stationary sources that generate air quality emissions. Examples of District-permitted stationary sources include back-up diesel generators, boilers, heaters, flares, cement kilns, and other types of combustion equipment, as well as non-combustion sources such as coating or printing operations.

Discussion

a) Would the proposed project conflict with or obstruct implementation of the applicable air quality plan?

The Bay Area Air Quality Management District (BAAQMD) is the regional air quality management agency for the San Francisco Bay Area Air Basin (SFBAAB), which comprises all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties; the southern portion of Sonoma County; and the southwestern portion of Solano County. Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions.[20]

Large projects that exceed regional employment, population, and housing planning projections have the potential to be inconsistent with the regional inventory compiled as part of the BAAQMD 2017 Bay Area Clean Air Plan.[21] Adoption and implementation of the proposed project would introduce two active play areas and an impervious concrete pathway to the project site. The proposed project would not have the potential to substantially affect housing, employment, and population projections within the region, which is the basis of the Bay Area Clean Air Plan projections. As discussed in section XVII Transportation and Circulation, the proposed project would generate approximately 1.89 average daily weekday trips and 16.74 average daily weekend trips. Therefore, the proposed project is not considered a regionally significant project under CEQA Guidelines Section 15206 that would affect regional vehicle miles traveled (VMT) and warrant intergovernmental review by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC). Furthermore, the project would fall under BAAQMD's operational criteria air pollutant screening size for city parks, which states that park projects under 2,613 acres do not have the potential to generate emissions that exceed BAAQMD's operational emissions

[19] Doggie pots are places to get and dispose of plastic bags.

[20] Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines, http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, accessed September 29, 2017.

[21] Bay Area Air Quality Management District (BAAQMD), 2017. Spare the Air – Cool the Climate, Final 2017 Clean Air Plan, http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en, accessed September 29, 2017.

thresholds (see Criteria (b) below). These thresholds are established to identify projects that have the potential to generate a substantial amount of criteria air pollutants. Because the project would not exceed these thresholds during project operations, the project would not be considered by BAAQMD to be a substantial emitter of criteria air pollutants. Therefore, the project would not conflict with or obstruct implementation of the 2017 Bay Area Clean Air Plan and impacts would be considered *less than significant*. This issue will not be discussed in the EIR.

b) Would the proposed project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

BAAQMD has identified thresholds of significance for criteria pollutant emissions and criteria air pollutant precursors, including reactive organic gases (ROG), oxides of nitrogen (NOx), coarse inhalable particulate matter (PM_{10}), and fine inhalable particulate matter ($PM_{2.5}$). Developments below the significant thresholds are not expected to generate sufficient criteria pollutant emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Construction Emissions

Construction activities produce combustion emissions from various sources, such as on-site heavy-duty construction vehicles, vehicles hauling materials to and from the project site, and motor vehicles transporting the construction crew. Site preparation activities produce fugitive dust emissions (PM_{10} and $PM_{2.5}$) from soil-disturbing activities, such as grading and excavation. Air pollutant emissions from construction activities on site would vary daily as construction activity levels change. BAAQMD's CEQA Guidelines identifies screening criteria for construction-related criteria air pollutant emissions.[22] Since BAAQMD's CEQA Guidelines does not have specific screening criteria for recreational trails, the screening criteria for city parks were used as the best fit. Based on BAAQMD's screening criteria, city parks of 67 acres or larger have the potential to generate a substantial increase in criteria air pollutant emissions and would need further analysis.[23] The project is substantially below the BAAQMD screening threshold and construction would generate nominal criteria air pollutant emissions. Furthermore, construction of the proposed project would meet the BAAQMD best management practices threshold for fugitive dust (shown below). Additionally, the small scale of the proposed project does not have the potential to result in overlapping construction activities. Therefore, a quantified analysis of the project's construction emissions is not necessary and the impact is *less than significant*.

BAAQMD Best Management Practices: The Applicant shall require their construction contractor to comply with the following BAAQMD Best Management Practices for reducing construction emissions of PM_{10} and $PM_{2.5}$:

- Water all active construction areas at least twice daily or as often as needed to control dust emissions. Watering should be sufficient to prevent airborne dust from leaving the site. Increased

[22] Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines, Chapter 3, Screening Criteria, Section 3-5, Construction-Related Impacts, page 3-5.

[23] Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines, Chapter 3, Screening Criteria, Table 3-1, Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes, pages 3-2 to 3-3.

watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.

- Pave, apply water twice daily or as often as necessary to control dust, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- Sweep daily (with water sweepers using reclaimed water if possible) or as often as needed all paved access roads, parking areas, and staging areas at the construction site to control dust.
- Sweep public streets daily (with water sweepers using reclaimed water if possible) in the vicinity of the project site, or as often as needed, to keep streets free of visible soil material.
- Hydro-seed or apply non-toxic soil stabilizers to inactive construction areas.
- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (e.g., dirt, sand).
- Limit vehicle traffic speeds on unpaved roads to 15 mph.
- Replant vegetation in disturbed areas as quickly as possible.
- Install sandbags or other erosion control measures to prevent silt runoff from public roadways.

The City of Lafayette or their designee shall verify compliance that these measures have been implemented during normal construction site inspections.

Operational Emissions

Because of its small size, the existing 0.6 acres of passive park does not constitute a substantial source of long-term air pollutant emissions from the burning of fossil fuels in vehicles (mobile sources), energy use for cooling, heating, and cooking (energy), or landscape equipment use and consumer products (area sources). The proposed project involves future development of two children's educational play structures, ADA accessible impervious pathways, and site furnishings. BAAQMD's CEQA Guidelines identifies screening criteria for operation-related criteria air pollutant emissions. Based on BAAQMD's screening criteria, city parks of 2,613 acres or larger have the potential to generate a substantial increase in criteria air pollutant emissions and would need further analysis.[24] The project is substantially below the BAAQMD screening threshold and would generate nominal criteria air pollutant emissions. Furthermore, as discussed in Section XVII, Transportation and Circulation, of this Initial Study, the proposed project would not generate a nominal number of new vehicular trips within the area; therefore, it is not anticipated to result in a net increase of mobile source emissions. Criteria air pollutant emissions generated by the project are a *less than significant impact*. This issue will not be discussed in the EIR.

[24] Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines, Chapter 3, Screening Criteria, Table 3-1, Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes, pages 3-2 to 3-3.

c) Would the proposed project result in a cumulatively considerable net increase of any criteria pollutant for which the project area is in non-attainment under applicable federal or State ambient air quality standards (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

The SFBAAB is currently designated as a nonattainment area for California and National ambient air quality standards (AAQS) for ozone (O3) and for $PM_{2.5}$, and a nonattainment area under the California AAQS for PM_{10}. Any project that does not exceed or can be mitigated to less than the BAAQMD significance levels, used as the threshold for determining major projects, does not add significantly to a cumulative impact. As explained under Criteria (b) above, operation of the project would fall under the BAAQMD screening criteria and would not result in regional emissions in excess of these threshold values. Likewise, the project would not generate an increase in criteria air pollutant emissions during construction activities. A quantified analysis of the project's construction emissions is not considered necessary, and this impact is considered *less than significant*. This issue will not be discussed in the EIR.

d) Would the proposed project expose sensitive receptors to substantial pollutant concentrations?

The project site is located adjacent to Moraga BoulevardLocalized concentrations refer to the amount of pollutants in a volume of air (ppm or $\mu g/m^3$) that can be correlated to potential health effects on sensitive populations. The closest sensitive receptors to the project are the residences located approximately 95 feet north of the project along 4th Street and to the South and East across Moraga Boulevard and 4th Street.

Construction Off-Site Community Risk and Hazards

Project construction would temporarily elevate concentrations of toxic air contaminants (TACs) and $PM_{2.5}$ in the vicinity of sensitive land uses during construction activities. However, construction of the project trail will not generate an intensive construction schedule or a substantial off-road equipment fleet that will result in significant construction impacts to off-site sensitive receptors. In addition, based on BAAQMD's screening criteria, city parks of 67 acres or larger have the potential to generate a substantial increase in criteria air pollutant emissions and would need further analysis.[25] The project is substantially below the BAAQMD screening threshold and construction would generate nominal criteria air pollutant emissions. Overall, construction emissions associated with the proposed project would not exceed BAAQMD's project level and cumulative significance thresholds for community risk and hazards, and the impact is *less than significant*. This issue will not be discussed further in the EIR.

Operational Phase On-Site Community Risk and Hazards

Upon adoption and implementation of the proposed project, the project will not be a substantial source of emissions; the children's education play structures would not generate TACs or $PM_{2.5}$. As discussed in Section XVII, Transportation and Circulation, for a conservative approach, this Initial Study assumes the proposed project would generate 1.89 trips on weekdays and 16.74 trips on Sundays. However, per the

[25] Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines, Chapter 3, Screening Criteria, Table 3-1, Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes, pages 3-2 to 3-3.

Institute of Transportation Engineers (ITE), this estimate is reserved for City parks 1 acre or larger. Therefore, it is unlikely that the proposed project would generate this many trips. In addition, based on BAAQMD's screening criteria, city parks of 2,613 acres or larger have the potential to generate a substantial increase in criteria air pollutant emissions and would need further analysis.[26] The project is substantially below the BAAQMD screening threshold and would generate nominal criteria air pollutant emissions. Therefore operational on-site emissions pose no risk to the community and a *less-than-significant* impact would result. This issue will not be discussed further in the EIR.

e) Would the proposed project create objectionable odors affecting a substantial number of people?

The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. As described above, adoption and implementation of the proposed project would facilitate future development of two children's educational play structures, ADA accessible impervious pathways, and site furnishings. Construction and operation of a city park would not generate substantial odors or be subject to odors that would affect a substantial number of people. Any construction-related odor emissions would be temporary and intermittent in nature. Additionally, noxious odors would be confined to the immediate vicinity of the construction equipment. By the time such emissions reach any sensitive receptor sites, they would be diluted to well below any level of air quality concern. Impacts would be *less than significant* and this issue will not be discussed in the EIR.

IV. Biological Resources

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	❒	■	❒	❒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	❒	❒	■	❒

[26] Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines, Chapter 3, Screening Criteria, Table 3-1, Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes, pages 3-2 to 3-3.

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	❒	❒	❒	■
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	❒	❒	■	❒
e) Conflict with any local policies or ordinances protecting biological resources, such as 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?	❒	❒	❒	■

The following discussion is primarily based on the documents listed below and included in Appendix C of this Initial Study:

- *Large Valley Oak at the new park at 4th & Moraga Boulevard*, prepared by Advance Tree Service Inc., on March 28, 2000.
- *Tree Inventory & Assessment at Leigh Creekside Park Improvement Plan*, prepared by InsideOut Design Inc., on November 4, 2015.
- *Leigh Creekside Park Improvement Plan*, prepared by InsideOut Design Inc., on February 10, 2016.
- *Leigh Creekside Park Master Plan*, prepared by InsideOut Design Inc., on September 28, 2016.

Existing Conditions

The project site is located within a residential neighborhood and bordered by residential housing to the north, south, and east of the property lines. The Las Trampas Creek runs along the western portion of the site; however, access to the creek is prevented via signage and a fence. The project site is classified as urban or developed by the Classification and Assessment with Landsat of Visible Ecological Groupings (CALVEG).[27] Existing landscaping includes 40 native and ornamental trees in varying stages of health ranging from poor to exemplary. Tree species include coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), California bay (*Umbellularia californica*), California buckeye (*Aesculus californica*),

[27] The CALVEG system was initiated in January 1978 by the Region 5 Ecology Group of the US Forest Service (USFS) to classify California's existing vegetation communities for use in statewide resource planning. CALVEG maps use a hierarchical classification on the following categories: forest; woodland; chaparral; shrubs; and herbaceous.

Incense cedar (*calocedrus decurrens*), cork oak (*Quercus suber*), pine (*Pinus sp*.), Douglas fir (*pseudotsuga menziesii*), and spruce (*Piecea pungens*).[28] Of the 40 trees on the project site, a total of two Incense cedar trees are proposed for removal.[29] Special-status species known to occur within a 1-mile radius of the project site include Alameda whipsnake (*Masticophis lateralis euryxanthus*), Mt. Diablo fairy-lantern (*Calochorths pulchellus),* Northen California legless lizard (*Anniella pulchra),* obscure bumble bee (*Bombus caliginosus),* pallid bat (*Atrozous pallidus*), and the western bumble bee (*Bombus occidentalis*).[30]

Discussion

a) Would the proposed 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 Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?

The project site is located in an urbanized setting within residential neighborhood. As described above, Las Trampas creek can be viewed from the western portion of the project site but access is not permitted. Special-status species are plants and animals that are legally protected under the State and/or federal Endangered Species Acts or other regulations, as well as 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. As described above, the project site is classified as urban or developed.[31] However, as shown on Figure 4-1, the Alameda whipsnake, obscure bumble bee, and pallid bat have been known to occur on or around the vicinity of the project site.[32] However, with implementation of Mitigation Measure BIO-1, the impact to special-status species would be *less than significant*.

Mitigation Measure BIO-1: The following measure shall be implemented to avoid and minimize potential impacts to special-status species:

- A qualified biologist shall conduct a pre-construction survey for special-status species known to occur in the vicinity of the project site no less than 7 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities. The survey shall cover the work area.
- If special-status species are found sufficiently close to work areas to be disturbed by construction, the biologist, in consultation with California Department of Fish and Wildlife (CDFW), would determine the extent of a construction-free buffer zone to be established.

[28] InsideOut Design Inc., 2015. *Tree Inventory & Assessment at Leigh Creekside Park Improvement Plan,* November 4.
[29] InsideOut Design, Inc., 2016. *Leigh Creekside Park Amended Master Plan*, September 28.
[30] California Department of Fish and Wildlife (CDFW), California Natural Diversity Database in Shape File Format, December 2017.
[31] The Urban or Developed category applies to landscapes that are dominated by urban structures, residential units, or other developed land use elements such as highways, city parks, cemeteries, and the like. In those cases in which the managed landscapes may have a considerable vegetation component, other land use categories may be more appropriate, such as Ornamental Conifer and Hardwood mixtures within city parks
[32] California Department of Fish and Wildlife (CDFW), California Natural Diversity Database in Shape File Format, December 2017.

- A report of findings shall be prepared by the qualified biologist and submitted to the City for review and approval prior to initiation of construction within the construction-free buffer zone. The report shall either confirm absence of special-status species or confirm the location of special-status species within a designated no-disturbance zone and construction can proceed.

Given the number of mature trees on the project site, there is a remote possibility that one or more species of birds protected under the federal Migratory Bird Treaty Act could nest in the scattered trees on the site. However, with implementation of Mitigation Measure BIO-1, the impact to nesting birds would be *less than significant*. This issue will not be discussed in the EIR.

Mitigation Measure BIO-2: Adequate measures shall be taken to avoid inadvertent take of species of birds protected under the Migratory Bird Treaty Act (MBTA) and the California Department of Fish and Game Code when in active use. This shall be accomplished by taking the following steps:

- If vegetation removal and initial construction (i.e., landscape grubbing/grading) is proposed during the nesting season (February 1 to August 31), a focused preconstruction survey for nesting raptors and migratory birds shall be conducted by a qualified biologist 7 days prior to the onset of vegetation removal or construction, in order to identify any active nests on the proposed project site.
- If no active nests are identified during the construction survey period, or if development is initiated during the non-breeding season (September 1 to January 31), vegetation removal and construction may proceed with no restrictions.
- If it is not possible to schedule demolition and construction between September 1 and January 31, pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests would be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). During this survey, the ornithologist would inspect all trees and other possible nesting habitats immediately adjacent to the construction areas for nests.
- If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with California Department of Fish and Wildlife (CDFW), would determine the extent of a construction-free buffer zone to be established around the nest, typically 250 feet, to ensure that raptor or migratory bird nests would not be disturbed during project construction.
- A report of findings shall be prepared by the qualified biologist and submitted to the City for review and approval prior to initiation of construction within the construction-free buffer zone. The report shall either confirm absence of any active nests or confirm that any young are located within a designated no-disturbance zone and construction can proceed.

b) Would the proposed project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?

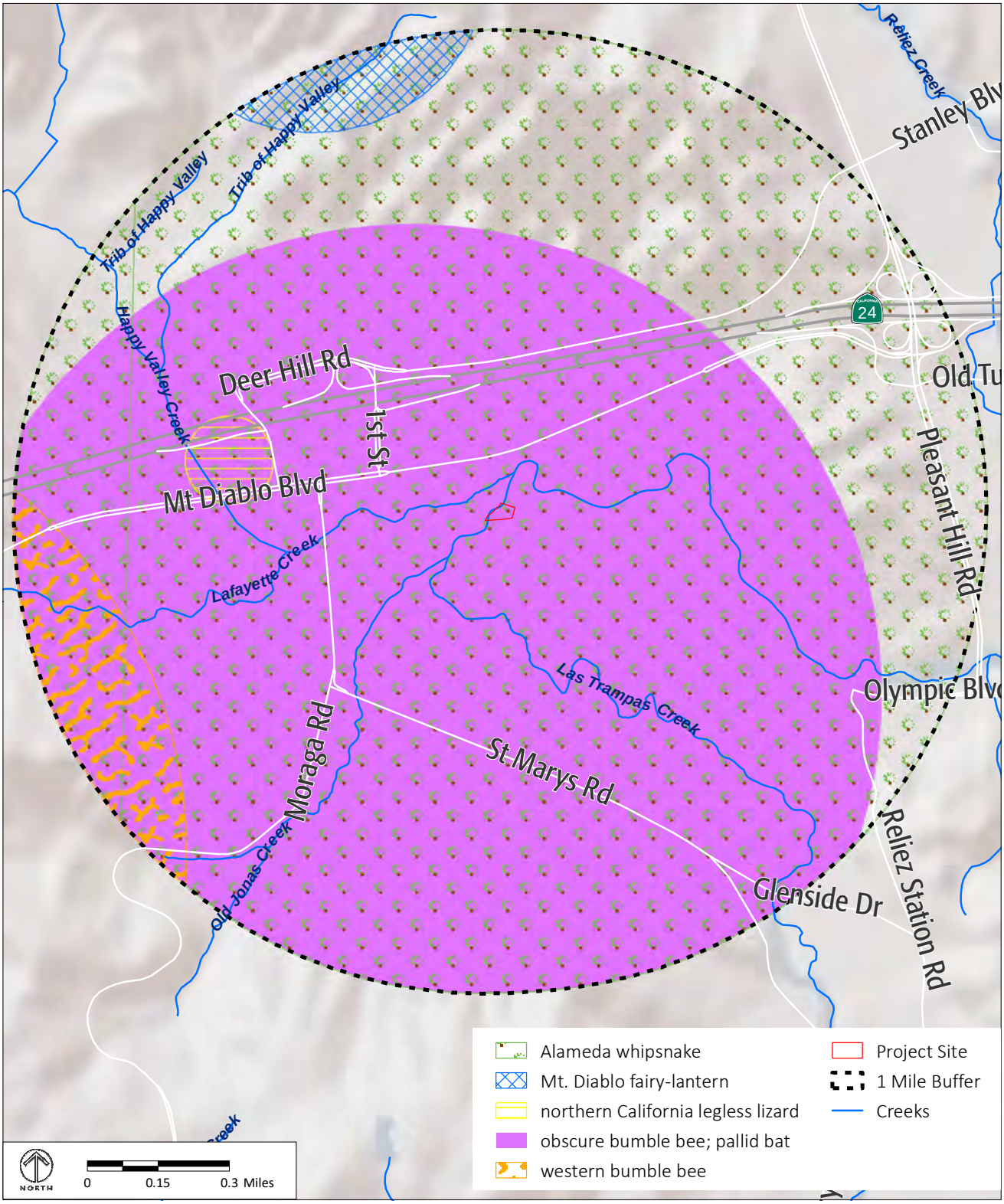
As described above, the project site is located within a residential neighborhood and bordered by residential housing to the north, south, and east of the property lines. The Las Trampas Creek runs along the western portion of the site; however, access to the creek is prevented via signage and a fence. Although riparian habitats are typically found in close proximity to creeks, as shown on Figure 4-2, the project site is classified as urban or developed.[33] In addition, the area surrounding Las Trampas Creek is classified as annual grassland, not riparian habitat. As discussed in Chapter 3, Project Description, non-native vegetation would be removed and any native vegetation necessitating removal would be relocated to another area within the project site. In addition, the proposed project would be required to comply with General Plan Policy OS-4.1 which directs the City to maintain creek setbacks for all structures along the City's watercourses, Program OS-4.4.3 which directs the City to emphasize the use of native plants in the public landscape, General Plan Policy OS-4.4 which directs the City to protect important groves of trees and existing vegetation, and Program OS-4.4-1 which directs the City to preserve existing healthy trees and native vegetation to the "maximum extent feasible."[34] Thus, the impact on sensitive natural communities would be *less than significant* and this issue will not be discussed in the EIR.

c) Would the proposed project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The project site is an existing neighborhood park located within an urbanized area. As shown on Figure 4-2, there are no wet-lands or jurisdictional waters present on the project site, therefore, no impact would occur directly. Potential indirect impacts to wetlands and other jurisdictional waters include: 1) an increase in the potential for sedimentation due to construction grading and ground disturbance, 2) an increase in the potential for erosion due to increased runoff volumes generated by impervious surfaces, and 3) an increase in the potential for water quality degradation due to increased pollutant levels in non-point pollutants. However, best management practices described in Section X, Hydrology and Water Quality, of this Initial Study, would be utilized to prevent any construction-generated sediments or pollutants from entering the storm drain system and entering downgradient regulated waters. Therefore, there would be *no impact* on jurisdictional wetlands and waters, and this issue will not be discussed in the EIR.

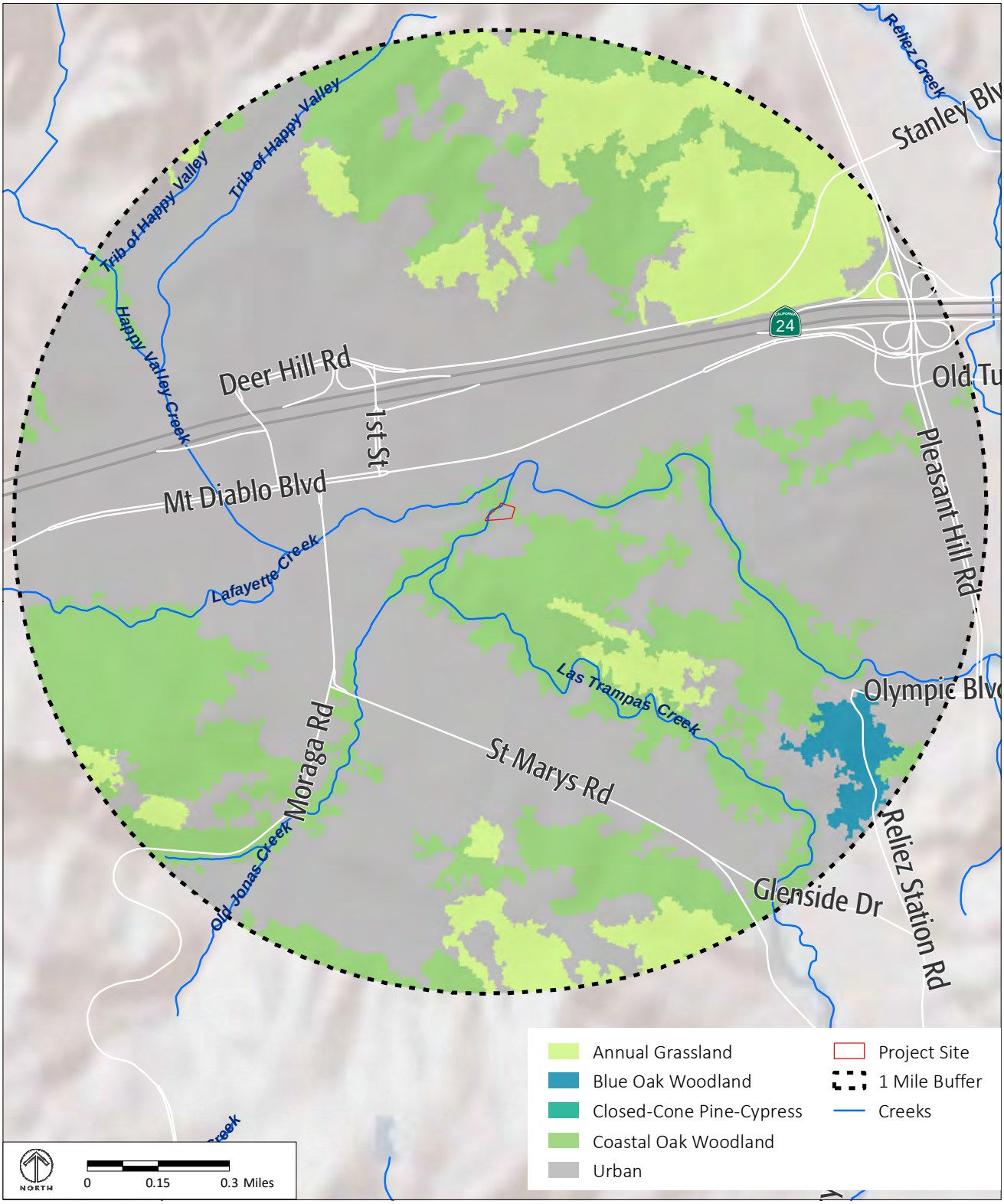
[33] The Urban or Developed category applies to landscapes that are dominated by urban structures, residential units, or other developed land use elements such as highways, city parks, cemeteries, and the like. In those cases in which the managed landscapes may have a considerable vegetation component, other land use categories may be more appropriate, such as Ornamental Conifer and Hardwood mixtures within city parks.

[34] City of Lafayette General Plan, Chapter III, Open Space and Conservation.



Source: California Department of Fish and Wildlife, CNDDB, December 2017; PlaceWorks, 2017; ESRI 2015.

Figure 4-1
Occurrences of Special-Status Species and Designated Critical Habitat



Source: USDA Forest Service, Calveg, 2017; PlaceWorks, 2017; ESRI 2015.

Figure 4-2
Vegetation

d) Would the proposed 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 native wildlife nursery sites?

As described above, the project site is located within a residential neighborhood and bordered by residential housing to the north, south, and east of the property lines. The Las Trampas Creek runs along the western portion of the site; however, access to the creek is prevented via signage and a fence. Surrounding residential development restricts potential movement of any native resident or migratory fish or wildlife species across the project site under existing conditions. The potential for movement of wildlife species along the Las Trampas Creek corridor would not change with implementation of the proposed project as the existing fence along the creek would remain. In addition the proposed project would be required to comply with LMC Section 6-1841, Structure Setback, which specifies creek setback requirements for new structures. Therefore, the proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, and impact would be *less than significant*. This issue will not be discussed further in the EIR.

e) Would the proposed project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The proposed project would necessitate the removal of two existing native Incense Cedar (*Calocedrus decurrens*) trees. Per LMC Subsection 6-1702(q) of the City's Tree Protection Ordinance, the two Incense Cedars are considered protected trees. Accordingly, the proposed project conflicts with the City are the Tree Protection Ordinance as well as General Plan Policy OS-4.4 and Program OS-4.4-1. General Plan Policy OS-4.4 which directs the City to protect important groves of trees and existing vegetation, and Program OS-4.4-1 which directs the City to preserve existing healthy trees and native vegetation to the "maximum extent feasible."[35]

Tree Protection Ordinance

LMC Chapter 6-17 pertains to tree protection. Subsection 6-1702(q) defines "protected tree" to include any tree on public or private property meeting one or more of the following six standards:

- Is a native coast live oak, canyon oak, blue oak, white oak, black oak, valley oak, interior live oak, California bay, California buckeye, and madrone with a trunk diameter of 12 inches or more measured located on developed property.
- Is of any size or species and designated to be protected and preserved as part of an approved development application.
- Is a native riparian bigleaf maple, boxelder, white alder, black walnut, cottonwood, red willow, arroyo willow, coast live oak, valley oak, California bay, California buckeye, and blue elderberry tree with a trunk diameter of 6 inches or more or has a multi-trunk with a diameter of 4 inches or more.
- Is of any species with a diameter of 6 inches or more located on an undeveloped property.

[35] City of Lafayette General Plan, Chapter III, Open Space and Conservation.

- Is a replacement tree planted as restitution for a violation of this chapter.
- Is a native tree of any size or species within a restricted ridgeline area.
- Is a tree of any size or species located within a public right-of-way or a private access easement.
- Is a tree of any size or species within a commercial zoning district.

It is a violation to destroy a protected tree without a Category I or Category II permit, or as allowed under exceptions to the ordinance. A category I permit is required to remove a protected tree on property not currently associated with a development application, and a category II permit applies to proposed removal on property associated with a development application. Both permit types allow for reasonable replacement as a condition, with replacement ratios defined in subsection 6-1707(g). Generally for each 6 inches or its fraction of the diameter of the tree to be removed, two 15-gallon trees are to be planted as replacement. In addition, if a tree that is removed is listed in Subsection 6-1702(q), the replacement tree shall be the same genus and species as the removed tree of an alternative species as approved by the City. Larger replacement trees may be required, or may be substituted at lower replacement ratios defined in subsection 6-1707(g)(2) as determined by the City. An in-lieu payment of an amount set by resolution of the City Council may be paid if the property cannot accommodate replacement plantings.

The proposed project must comply with the provisions of the City's Tree Protection Ordinance. The intent of the ordinance is to implement the relevant goals, policies, and programs of the General Plan related to protection of healthy trees such as Policy OS-4.4 and Program OS-4.4-1 mentioned above, for which the proposed project does not comply because of the number of trees to be removed. A category II permit must be secured to allow for the removal of any trees that qualify as a "protected tree" as part of the development application. Generally for each six inches or its fraction of the diameter of the tree to be removed, two 15-gallon trees are to be planted as replacement. Larger replacement trees may be required, or may be substituted at lower replacement ratios as determined by the City. An in-lieu payment of an amount set by resolution of the City Council may be paid if the property cannot accommodate replacement.

Tree Resource Review

The following provides a discussion of existing tree reports on the project site prepared by the City's Landscape Consultant (InsideOut Design Inc.) on November 4, 2015, February 10, 2016, and September 28, 2016. This section also includes information from supplemental documents prepared by Advance Tree Service Inc. on March 28, 2000. Collectively, these documents are referred to as "Tree Reports" and included in Appendix C of this Initial Study.

A total of 40 trees comprised of coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), California bay (*Umbellularia californica*), California buckeye (*Aesculus californica*), Incense cedar (*calocedrus decurrens*), cork oak (*Quercus suber*), pine (*Pinus sp*.), Douglas fir (*pseudotsuga menziesii*), and spruce (*Piecea pungens*) were evaluated.[36] Of the 40 on-site, two trees for are identified for removal; an 18" Incense cedar and a 19" Incense cedar. As described above, Subsection 6-1702(q) of the City of Lafayette's

[36] InsideOut Design Inc., 2015. *Tree Inventory & Assessment at Leigh Creekside Park Improvement Plan,* November 4.

Tree Protection Ordinance designates a tree "of any species with a diameter of 6 inches or more located on an undeveloped property" as protected. Therefore, both trees proposed for removal are considered protected trees by the City. The remaining 38 on-site trees would be preserved on the project site, most of which are oak species. Oaks and most trees are highly sensitive to disturbance to the root systems, trunk and major limb systems. If the root system is severely damaged or improper conditions are created as a result of increased irrigation, soil compaction, placement of fills, or other changes, existing trees may suffer severe decline and eventually death. Proposed construction activities may result in damage to the root zone. Therefore, careful controls during construction would be necessary to prevent direct and indirect impacts to the remaining trees, and to ensure no additional tree loss results from the proposed project.

The Tree Reports compiled information on likely tree replacement requirements based on the standard in the City's Tree Protection Ordinance that two 15-gallon plantings be provided for each 6 inches of trunk diameter removed, or fraction thereof. The Tree Reports determined that under the City's typical replacement standard, a total of 13 replacement 15-gallon trees would be required.[37]

In addition, to the tree replacement recommendations, the Tree Reports include a number of other recommendations to ensure that impacts to root systems of the remaining on-site trees be minimized. Given the proposed removal of two trees and the potential impacts to remaining trees on the project site, this is considered a significant impact; however, with implementation of Mitigation Measure BIO-2, the impact would be *less than significant.*

Mitigation Measure BIO-3: The proposed project shall comply with City of Lafayette Tree Protection Ordinance, Chapter 6-17 of the Lafayette Municipal Code, and a Tree Protection and Replacement Program (Program) shall be developed by a certified arborist and implemented to provide for adequate protection and replacement of native and planted trees larger than 6 inches diameter at breast height possibly affected by proposed improvements. A category II permit shall be obtained for the removal of any "protected tree," and replacement plantings shall be provided as approved by the City. Pursuant to the requirements of Section 6-1707 of the Tree Protection and Preservation Ordinance the Program shall include the following provisions to protect all trees to be preserved:

- All grading, improvement plans, and construction plans prepared for building permits shall clearly indicate trees proposed to be removed, altered, or otherwise affected by proposed development. The tree information on grading and development plans shall indicate the number, size, species, assigned tree number and location of the dripline of all trees on the property that are to be retained/preserved.
- A qualified arborist shall be retained to perform exploratory root search via an air spade[38] on trees located in close proximity to the two proposed benches (trees #27 through #34, #41, #44, and #45) to determine if there is a conflict with the post locations of the proposed benches and any roots. The arborist shall prepare a report detailing the findings and submit to the City for review. The exact location of the proposed benches may be adjusted based on the report findings.

[37] InsideOut Design Inc., 2016. *Leigh Creekside Park Improvement Plan,* February 10.
[38] Air spade: a pneumatic toll that removes soil, via highly compressed air, minimizing root damage.

- Erect tree protection fencing prior to the commencement of ground disturbing activities to protect trees and minimize root disturbances.
- Substitute the concrete edging along the perimeter of the thick recreational pervious rubber safety surface in the proposed Ice Play Area with steel or aluminum edging. The edging shall be flush (or just below) with the top of porous paving. All radii and transitions of the metal edging shall be smooth and continuous.

f) Would the proposed 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?

There are no adopted habitat conservation plans or natural community conservation plans which would apply to the proposed project. Accordingly, there would be *no impact* and this issue will not be discussed in the EIR.

V. Cultural Resources

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	❒	❒	❒	■
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	❒	■	❒	❒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	❒	■	❒	❒
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	❒	❒	■	❒

Existing Conditions

The first known inhabitants of the Lafayette area were Costanoan or Ohlone Native Americans who settled along Lafayette Creek and Happy Valley, as evidence by prehistoric archaeological finds.[39] European settlers arrived in the late 18th Century when Franciscan priests from Spain established missions. Likely Native Americans who were in the area were speakers of a Bay Miwok language, part of the Utian language family. Subsequently, Lafayette was developed along two important pioneer roads in the area, known today as Mt. Diablo Boulevard and Moraga Road. In 1965, the decision was made to locate a Bay Area Rapid Transit (BART) station in downtown Lafayette, three years before the City of Lafayette was incorporated.

[39] Lafayette Historical Society, Lafayette: A Pictorial History, Indian Country, http://lafayettehistory.org/town-history/pictorial-history/indian-country/, accessed October 3, 2017.

The project site is located within an urbanized, developed area of Lafayette and currently serves as a passive neighborhood park. The project site is bordered by 4th Street to the east, Moraga Boulevard to the south, and Las Trampas Creek to the west. There are no existing buildings on the project site. Accordingly, the project site is not included in the National Register of Historic Places or the California Office of Historic Preservation (OHP).[40] In addition, the project site does not contain any of the five officially-designated historic landmarks of the City of Lafayette.[41]

Discussion

a) Would the proposed project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

There are no existing structures on the project site. Accordingly, there would be *no impact* and this issue will not be discussed in the EIR.

b) Would the proposed project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

The project site is not identified as a Cultural Resource under the Lafayette General Plan and no known archeological resources are located on the project site. However as described above, the project site is bordered by Las Trampas Creek. Given that numerous prehistoric archaeological sites have been identified along the City of Lafayette's creeks, there is a potential to unearth previously undiscovered buried archeological resources during minor surface grading activities associated with the adoption and implementation of the proposed project.[42]

California Public Resource Code Section 21083.2, Archaeological Resources, requires that reasonable efforts be taken to preserve the resources in place and details required procedures if unique archaeological resources cannot be preserved in place. Therefore, compliance with State regulations and with General Plan Goal LU-22 and Policy LU-22.1, which call for protection of archaeological resources, would ensure that the potential impacts to archaeological resources are minimized to the maximum extent practicable.[43] Nonetheless, impacts to unknown archaeological resources would be potentially significant; however, with implementation of CULT-1, the impact on archaeological resources would be *less than significant.* This issue will not be discussed in the EIR.

> Mitigation Measure CULT-1: A qualified archaeologist will be on-site to monitor the initial excavation of native soil once all pavement and engineered soil is removed from the project site. If the archaeologist determines that no resources are likely to be found on site, no additional monitoring will be required. If prehistoric or historical archaeological deposits are discovered during project activities, all work within 25 feet of the discovery shall be redirected, the Planning Department shall

[40] National Register of Historic Places, http://nrhp.focus.nps.gov, accessed October 3, 2017.
[41] Lafayette Downtown Specific Plan, 2012. Chapter 4: Downtown Character, http://www.lovelafayette.org/home/showdocument?id=1507, page 60, accessed October 3, 2017.
[42] Lafayette General Plan, Chapter I, Land Use Chapter, Cultural Resources, page I-33.
[43] City of Lafayette General Plan, Chapter 1, Land Use.

be contacted directly, and a qualified archaeologist shall be contacted to assess the situation, consult with agencies as appropriate, and make recommendations regarding the treatment of the discovery. Preservation in place shall be implemented if feasible. Excavation as mitigation shall be limited to those parts of resources that would be damaged or destroyed by the proposed project. Possible mitigation under CEQA emphasizes preservation in place measures, including planning construction to avoid archaeological sites, incorporating sites into open spaces, covering sites with stable soils, and deeding the site into a permanent conservation easement. Project personnel should not collect or move any archaeological materials or human remains and associated materials. Archaeological resources can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, basalt, or quartzite tool-making debris; bone tools; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash and charcoal, shellfish remains, faunal bones, and cultural materials); and stone-milling equipment (e.g., mortars, pestles, handstones). Prehistoric archaeological sites often contain human remains. Historical materials can include wood, stone, concrete, or adobe footings, walls, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, metal, and other refuse.

c) Would the proposed project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As described above, the project site is located within an urbanized, developed area of Lafayette and currently serves as a passive neighborhood park. While no paleontological resources have been identified within the project location, because the proposed project requires minor surface grading there could be fossils of potential significance and other unique geological features that have not been recorded. Therefore, adoption and implementation of the proposed project could cause damage to, or destruction of, paleontological resources or unique geologic features. However, implementation of Mitigation Measure CULT-2, the proposed project would result in a *less-than-significant* impact on potentially undiscovered paleontological resources or geologic feature. This issue will not be discussed in the EIR.

Mitigation Measure CULT-2: If paleontological resources are encountered during grading or excavation, all construction activities within 50 feet must stop and the City shall be notified. A qualified archeologist shall inspect the findings within 24 hours of discovery. Cultural resources shall be recorded on California Department of Parks and Recreation (DPR) Form 523 (Historic Resource Recordation form). If it is determined that the proposed project could damage unique paleontological resources, mitigation shall be implemented in accordance with Public Resources Code Section 21083.2 and Section 15126.4 of the CEQA Guidelines. Possible mitigation under Public Resources Code Section 21083.2 requires that reasonable efforts be made for resources to be preserved in place or left undisturbed. Preservation in place shall be implemented if feasible. Excavation as mitigation shall be limited to those parts of resources that would be damaged or destroyed by a project. Possible mitigation under CEQA emphasizes preservation in place measures, including planning construction to avoid archaeological sites, incorporating sites into parks and other open spaces, covering sites with stable soil, and deeding the site into a permanent conservation easement. Under CEQA Guidelines, when preservation in place is not feasible, data recovery through excavation shall be conducted with a data recovery plan in place. Therefore, when considering these possible mitigations, the City shall have a preference for preservation in place

d) Would the proposed project disturb any human remains, including those interred outside of dedicated cemeteries?

Similar to the discussions under Criteria (b) and (c) above, there are no known human remains on the project site; however, the potential to unearth unknown remains during minor surface grading activities associated with the adoption and implementation of the proposed project could occur. Any human remains encountered during ground-disturbing activities associated with the proposed project would be subject to federal, State, and local regulations to ensure no adverse impacts to human remains would occur in the unlikely event human remains are found. California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98 and the California Code of Regulations Section 15064.5(e) (CEQA), mandate procedures of conduct following the discovery of human remains. According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The Contra Costa County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours, who would, in turn, notify the person the NAHC identifies as the Most Likely Descendants (MLD) of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the City shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the City does not accept the MLD's recommendations, the City or the descendent may request mediation by the NAHC. Compliance with these regulations would ensure that human remains are handled appropriately. Accordingly, the proposed project would result in a *less-than-significant* impact on potentially undiscovered human remains. This issue will not be discussed in the EIR.

VI. Tribal Cultural Resources

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is: i) 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), or ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set	❒	❒	■	❒

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
forth in subdivision (c) of Public Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resource Code Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance to a California Native American tribe.				

Existing Conditions

Assembly Bill (AB) 52, which took effect on July 1, 2015, amends CEQA and adds standards of significance that relate to Native American consultation and certain types of cultural resources. Projects subject to AB 52 are those that file a notice of preparation for an EIR or notice of intent to adopt a negative or mitigated negative declaration on or after July 1, 2015. As of July 1, 2016, the Governor's Office of Planning and Research (OPR) developed guidelines and the NAHC informed tribes which agencies are in their traditional area. In response to these guidelines, this Section VI, Tribal Cultural Resources, has been added as a stand-alone section to this Initial Study.

AB 52 requires the CEQA lead agency to begin consultation with a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if the Tribe requests in writing, to be informed by the lead agency through formal notification of the proposed projects in the area. The consultation is required before the determination of whether a negative declaration, mitigated negative declaration, or EIR is required. In addition, AB 52 includes time limits for certain responses regarding consultation. AB 52 also adds "tribal cultural resources" (TCR) to the specific cultural resources protected under CEQA.[44] CEQA Section 21084.3 has been added, which states that "public agencies shall, when feasible, avoid damaging effects to any tribal cultural resources." Information shared by tribes as a result of AB 52 consultation shall be documented in a confidential file, as necessary, and made part of a lead agencies administrative record. In response to AB 52, the City of Lafayette has not received any request from any Tribes in the geographic area with which it is traditionally and culturally affiliated with or otherwise to be notified about projects in the City of Lafayette.

A TCR is defined under AB 52 as a site, feature, place, cultural landscape that is geographically defined in terms of size and scope, sacred place, and object with cultural value to a California Native American tribe that are either included or eligible for inclusion in the California Register of Historic Resources or included a local register of historical resources, or if the City of Lafayette, acting as the lead agency, supported by substantial evidence, chooses at its discretion to treat the resource as a TCR.

[44] California Environmental Quality Act (CEQA) Statute, Section 21074.

Discussion

a) Would the proposed project cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:

i) 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), or

ii) 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 Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resource Code Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance to a California Native American tribe?

As discussed under Criteria (b) and (d) in Section V, Cultural Resources, no known archeological resources, ethnographic sites or Native American remains are located on the project site. As discussed under Criterion (d) in Section V, Cultural Resources, compliance with State and federal regulations would reduce the likelihood of disturbing or discovering human remains, including those of Native Americans. Nonetheless, impacts to unknown tribal cultural resources would be potentially significant; however, with implementation of CULT-3, the impact on unknown tribal cultural resources would be *less than significant.* This issue will not be discussed in the EIR.

Mitigation Measure CULT-3: A qualified archaeologist will be on-site to monitor the initial excavation of native soil once all pavement and engineered soil is removed from the project site. If the archaeologist determines that no resources are likely to be found on site, no additional monitoring will be required. If tribal cultural resources are discovered during project activities, all work within 25 feet of the discovery shall be redirected, the Planning Department shall be contacted directly, and a qualified archaeologist shall be contacted to assess the situation, consult with agencies as appropriate, and make recommendations regarding the treatment of the discovery. Preservation in place shall be implemented if feasible. Excavation as mitigation shall be limited to those parts of resources that would be damaged or destroyed by the proposed project. Possible mitigation under CEQA emphasizes preservation in place measures, including planning construction to avoid archaeological sites, incorporating sites into open spaces, covering sites with stable soils, and deeding the site into a permanent conservation easement. Project personnel should not collect or move any tribal cultural resources and associated materials. Tribal cultural resources can include a site, feature, place, cultural landscape that is geographically defined in terms of size and scope, sacred place, and object with cultural value to a California Native American tribe that are either included or eligible for inclusion in the California Register of Historic Resources or included a local register of historical resources, or if the City of Lafayette, acting as the lead agency, supported by substantial evidence, chooses at its discretion to treat the resource as a tribal cultural resource.

VII. Geology and Soils

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving: i) Strong seismic ground shaking? ii) Seismic-related ground failure, including liquefaction? iii) Landslides, mudslides or other similar hazards?	❒	❒	❒	■
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 Section 1803.5.3 of the California Building Code, creating substantial risks to life or property?	❒	❒	■	❒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?	❒	❒	❒	■

Existing Conditions

The project site is located in the California Coast Ranges geomorphic province, approximately 11 miles west of Mount Diablo and 10 miles east of San Francisco Bay. The United States Department of Agriculture (USDA) web-based soil database indicates that the predominant soil type at the project site belong to the Clear Lake clay series which is composed of poorly drained clayley alluvium derived from metamorphic and sedimentary rock. [45] The topography of the project site is mapped as a flat-lying area away from the path of slides.[46]

The 2007 Working Group on California Earthquake Probabilities, a collaborative effort involving the California Geological Survey (CGS), Southern California Earthquake Center, and U.S. Geological Survey (USGS), estimated that the 30-year probability of a magnitude 6.7 or greater earthquake striking the San Francisco Bay area was 63 percent.[47] The California Geologic Survey (CGS) in their implementation of the

[45] United States Department of Agriculture (USDA), Natural Resources Conservation Service, Web Soil Survey, Contra Costa County, https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx, accessed October 3, 2017.

[46] City of Lafayette General Plan, Geologic and Seismic Safety Element, Landslide Hazard, Map VI-2.

[47] California Geological Survey (CGS) and Southern California Earthquake Center. 2007 Working Group on California Earthquake Probabilities, The Uniform California Earthquake Rupture Forecast, Version 2 (UCERF 2). CGS Special Report 203, URL: http://pubs.usgs.gov/of/2007/1437/, accessed October 3, 2017.

state-wide under the 1972 Alquist-Priolo Act, has not identified any active or potentially active earthquake faults at the project site or in its immediate vicinity.

The closest CGS-mapped active fault is the Concord Fault, which trends north-northwest and lies roughly 7.4 miles east-northeast of the project site at its closest approach. Nevertheless, an earthquake of moderate to high magnitude generated within the San Francisco Bay area could produce strong ground shaking at the project site. The degree of shaking would be subject to a number of variables, such as the magnitude of the event, the distance to the zone of rupture, and local geologic conditions.

The CGS' Seismic Hazards Mapping Program has not published any (seismically induced) liquefaction hazard zone maps for the project site or its vicinity.

Discussion

a) Would the proposed project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving: i) Strong seismic ground shaking? ii) Seismic-related ground failure, including liquefaction? iii) Landslides, mudslides or other similar hazards?

It should be noted that exposure of people or structures to seismic hazards as a result of project implementation is no longer a CEQA impact. According to the California Supreme Court, CEQA applies to a project's impact on the environment, not the environment's impact on the project, unless the project would exacerbate a particular environmental hazard.[48] From the standpoint of geology and soils, proposed project implementation would not cause or worsen seismic hazards. Although further evaluation of potential impacts a)(i), a)(ii), a)(iii), and a)(iv) is not strictly required under CEQA, the impacts are discussed below for informational purposes.

The project site is situated in a region characterized by numerous active and potentially active faults, many of which have exhibited recurring seismic activity. None of the faults mapped within the City of Lafayette meet the requisite of being active or potentially active, defined by the City's General Plan as having recorded earth movement or displacement within the last 10,000 years.[49] No active or potentially active faults have been mapped within the City of Lafayette.

The site is located within a State-designated Alquist-Priolo Earthquake Fault Zone, however, no mapped faults are known to traverse the site.[50] Additionally, the California Geological Survey (CGS) does not include Lafayette on its lists of cities that are affected by Alquist-Priolo Zones.[51] The project site is mapped as a flat-lying area away from the path of slides[52] and there are no mapped earthquake faults that pass through or lie adjacent to the project site, therefore, the potential for earthquake-related ground shaking,

[48] California Supreme Court, 2015. California Building Industry v. Bay Area Air Quality Management District, Opinion No. S213478, date filed December 17, 2015.

[49] Lafayette General Plan, Chapter VI, Safety Chapter, Seismic Hazards, page VI-4.

[50] California Department of Conservation (DOC), Geologic Hazards and Mapping program, Walnut Creek Quadrangle, http://gmw.consrv.ca.gov/shmp/download/quad/WALNUT_CREEK/maps/WALNUT_CREEK.PDF, accessed October 3, 2017.

[51] California Department of Conservation (DOC), Regional Geologic Hazards and Mapping Program, Fault-Rupture Hazard Zones in California, 2010, http://www.conservation.ca.gov/cgs/rghm/ap/Pages/affected.aspx, accessed October 3, 2017.

[52] City of Lafayette General Plan, Geologic and Seismic Safety Element, Landslide Hazard, Map VI-2.

failure (including liquefaction), landslides, mudslides or other similar hazards is considered low at the project site. The project would introduce a park related activity (e.g., active play structures) to an existing park and would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death from a seismic event. Accordingly, there would be *no impact* and this issue will not be discussed in the EIR.

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

Adoption and implementation of the proposed project would entail minimal grading to accommodate the proposed ADA accessible impervious pathways and educational play structures. Future construction activities and the project site's close proximity to the Las Trampas Creek may contribute to soil erosion and/or loss of topsoil. However, the proposed project would be required to comply with LMC Section 716-2.604, Prohibited action – Grading, which prohibits any person from grading, whether or not a permit is required, so that dirt, soil, rock, debris, or other material washed, eroded, or moved from the property by natural or artificial means does not create a public nuisance or hazard.[53] In addition, the project would be subject to LMC Chapter 5-4, Stormwater Management and Discharge Control, which requires the development and implementation of Stormwater Pollution Prevention Plans (SWPPP) and Best Management Practices (BMPs) in order to control erosion at construction sites.[54] The proposed project is required to comply with these regulatory requirements which are designed to ensure preservation of the Las Trampas Creek. Accordingly, the impact would be *less than significant* and this issue will not be discussed in the EIR.

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

As described above under Criterion (a) the topography of the project site is mapped as a flat-lying area away from the path of slides.[55] In addition, the CGS has not identified any seismically induced landslide hazard zones at the project site or in its vicinity. Accordingly, there would be *no impact* and this issue will not be discussed in the EIR.

d) Would the proposed project be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code, creating substantial risks to life or property?

The underlying soil on the project site is largely composed of Clear Lake clay series[56] which are known to be poor foundation material because they swell when wet and shrink when dry producing extensive cracks.[57] However, given that proposed project would not involve new housing, employment centers, or roads for vehicles or parking, it is unlikely that siting the proposed project on expansive soils would create

[53] Title 3, Building Regulations, Chapter 3-7, Grading, Section 716-2.604, Prohibited action – Grading.
[54] Title 5, Health and Sanitation, Chapter 5-4, Stormwater Management and Discharge Control.
[55] City of Lafayette General Plan, Geologic and Seismic Safety Element, Landslide Hazard, Map VI-2.
[56] United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx, accessed October 3, 2017.
[57] United States Department of Agriculture, Natural Resources Conservation Service, Clear Lake Series, https://soilseries.sc.egov.usda.gov/OSD_Docs/C/CLEAR_LAKE.html, accessed October 3, 2017.

substantial risks to life or property. Therefore, impacts with respect to expansive soils would be *less than significant*. This issue will not be discussed in the EIR.

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

Adoption and implementation of the proposed project would not require the construction or use of septic tanks or alternative wastewater disposal systems. As such, there will be *no impact* from the proposed project associated with soils that are inadequate for the use of septic tanks or alternative wastewater disposal systems and this issue will not be discussed in the EIR.

VIII. Greenhouse Gas Emissions

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	❒	❒	■	❒
b) Conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	❒	❒	■	❒

Existing Conditions

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as greenhouse gases (GHGs), into the atmosphere. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, carbon dioxide (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydro fluorocarbons, perfluorocarbons, and chlorofluorocarbons.[58,59] This section analyzes the project's contribution to global climate change impacts in California.

[58] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

[59] Black carbon emissions contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon emissions is the most strongly light-absorbing component of particulate matter emitted from burning fuels. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing particulate matter from diesel engines and burning activities (California Air Resources Board. 2017, March 14. *Final Proposed Short-Lived Climate Pollutant Reduction Strategy*. Available at: https://www.arb.ca.gov/cc/shortlived/shortlived.htm). However,

Discussion

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

The project does not generate enough greenhouse gas (GHG) emissions on its own to influence global climate change; therefore, this GHG analysis measures the project's contribution to the cumulative environmental impact. Because of its small size, the existing 0.6 acres of passive park space does not generate a substantial amount of GHG emissions from the burning of fossil fuels in trucks and other vehicles (mobile sources), energy use for cooling, heating, and cooking (energy), landscape equipment use and consumer products (area sources, or indirect emissions from water use, wastewater generation, and solid was disposal. Likewise, the proposed project would not contribute to global climate change through the increase in air emissions from heating and cooling associated with a building.

The proposed project involves future development of two children's educational play structures, ADA accessible impervious pathways, and site furnishings. As discussed in Section XVII, Transportation and Circulation, for a conservative approach, this Initial Study assumes the proposed project would generate 1.89 trips on weekdays and 16.74 trips on Sundays. However, per the Institute of Transportation Engineers (ITE), this estimate is reserved for City parks 1 acre or larger. Therefore, it is unlikely that the proposed project would generate this many trips. BAAQMD does not have thresholds of significance for construction-related GHG emissions. GHG emissions from construction activities are short term and therefore not assumed to significantly contribute to cumulative GHG emissions impacts of the proposed project. Based on BAAQMD's screening criteria, city parks of 600 acres or larger have the potential to generate a substantial increase in GHG emissions and would need further analysis. The proposed park changes would be below the BAAQMD screening threshold and would generate nominal GHG emissions. Therefore, GHG emissions generated by the proposed project are a *less than significant* impact. This issue will not be discussed in the EIR.

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

Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan, the Metropolitan Transportation Commission's (MTC)/Association of Bay Area Governments' (ABAG) Plan Bay Area, and the City of Lafayette Environmental Action Plan A consistency analysis with these plans is presented below.

CARB's Scoping Plan

In accordance with AB 32, the California Air Resources Board (CARB) developed the 2008 Scoping Plan to outline the State's strategy to achieve 1990 level emissions by year 2020. To estimate the reductions necessary, CARB projected Statewide 2020 business as usual (BAU) GHG emissions (i.e. GHG emissions in the absence of statewide emission reduction measures). CARB identified that the State as a whole would

state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

be required to reduce GHG emissions by 28.5 percent from year 2020 BAU to achieve the targets of AB 32. The state is currently preparing the *2030 Target Scoping Plan Update* to address the new 2030 interim target to achieve a 40 percent reduction below 1990 levels by 2030, established by Senate Bill (SB) 32. The GHG emissions forecast was updated as part of the First Update to the Scoping Plan. In the First Update to the Scoping Plan, CARB projected that statewide BAU emissions in 2020 would be approximately 509 million $MTCO_2e$.[60] Therefore, to achieve the AB 32 target of 431 million $MTCO_2e$ (i.e., 1990 emissions levels) by 2020, the State would need to reduce emissions by 78 million $MTCO_2e$ compared to BAU conditions, a reduction of 15.3 percent from BAU in 2020.[61,62]

Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard (LCFS), California Appliance Energy Efficiency regulations; California Building Standards (i.e. CALGreen and Building and Energy Efficiency Standards); California Renewable Energy Portfolio standard (33 percent RPS by 2040); changes in the corporate average fuel economy standards (e.g. Pavley I and Pavley II); and other measures that would ensure the State is on target to achieve the GHG emissions reduction goals of AB 32. Statewide GHG emissions reduction measures that are being implemented over the next five years would reduce the project's GHG emissions. The proposed project does not fall into any of these categories, and does not need to mitigate according to these standards. Impacts would be *less than significant* and this issue will not be discussed in the EIR.

Plan Bay Area

To achieve MTC's/ABAG's sustainable vision for the Bay Area, the Plan Bay Area land use concept plan for the region concentrates the majority of new population and employment growth in the region in Priority Development Areas (PDAs). PDAs are transit-oriented, infill development opportunity areas within existing communities. Consequently, an overarching goal of the regional plan is to concentrate development in areas where there are existing services and infrastructure rather than allocate new growth to outlying areas where substantial transportation investments would be necessary to achieve the per capita passenger vehicle, vehicle miles traveled, and associated GHG emissions reductions. The proposed project is not within a PDA. Growth associated with the project is consistent with ABAG projections and would not exceed regional population and employment projects. The proposed project would be consistent with the overall goals of Plan Bay Area. Therefore, the proposed project would not conflict with the land use concept plan for the City of Lafayette identified in the Plan Bay Area. The impact would be *less than significant* and this issue will not be discussed in the EIR.

[60] The business as usual (BAU) forecast includes GHG reductions from Pavley and the 33 percent Renewable Portfolio Standard (RPS).

[61] California Air Resources Board (CARB), 2014. First Update to the Climate Change Scoping Plan: Building on the Framework, Pursuant to AB 32, The California Global Warming Solutions Act of 2006.

[62] If the GHG emissions reductions from Pavley I and the Renewable Electricity Standard are accounted for as part of the BAU scenario (30 million $MTCO_2e$ total), then the State would need to reduce emissions by 108 million $MTCO_2e$, which is a 20 percent reduction from BAU.

Contra Costa County Climate Action Plan

The County of Contra Costa adopted the CAP in December, 2015. The CAP is intended to streamline future environmental review of development projects in the Contra Costa County by following the CEQA Guidelines and meeting the BAAQMD expectations for a Qualified GHG Reduction Strategy. The CAP provides a set of GHG reduction measures to achieve the statewide AB 32 target of a 15 percent reduction below baseline emissions by 2020. Additionally, the CAP identifies reduction strategies including improvements in energy efficiency and conservation, renewable energy, land use and transportation, solid waste, water conservation, and government operations. The proposed project would generate minimal vehicle trips, would consume little energy and water, and would not generate substantial solid waste. The project would be consistent with the goals and measures identified in the County of Contra Costa's CAP. Therefore, the impacts would be *less than significant* and this issue will not be discussed in the EIR.

City of Lafayette Environmental Action Plan

The City of Lafayette recently adopted its Environmental Action Plan (Action Plan, EAP), which identifies GHG emissions sources within the City and provides a framework for meeting the GHG reduction goals of AB 32, Executive Order S-3-05, and Executive order B-30-15.The Action Plan is a policy document that includes quantitative goals and associated recommended programs, enabling the City to maintain local control while implementing State mandates to lower greenhouse gas emissions and to monitor other environmental factors. The Action Plan is intended to primarily be used by the City for guidance when developing or updating documents, policies, or procedures or when developing annual Work Plans, but also includes a number of programs that are related to the work of community groups and organizations. The document primarily focuses on resource conservation, community health, and transportation strategies to reduce GHG emissions, including: solid waste, water, energy use, green construction, food & agriculture, and green business policies[63]. The proposed park project would be consistent with the goals of the EAP, as it would maintain open green space and would be water efficient in compliance with CalGreen's water conservation requirements.

IX. Hazards and Hazardous Materials

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	❒	❒	■	❒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	❒	❒	■	❒

[63] City of Lafayette, 2017. Environmental Action Plan. http://www.lovelafayette.org/home/showdocument?id=4138

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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 material sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?	❒	❒	❒	■
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	❒	❒	❒	■
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	❒	❒	❒	■
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	❒	❒	❒	■
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	❒	❒	❒	■

Existing Conditions

The term "hazardous material," as used in this Initial Study, includes all materials defined in the California Health and Safety Code Section 25501 definition of a hazardous material. That is: "A material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment." A search of the California Department of Toxic Substances (DTSCs) EnviroStor database on October 3, 2017, revealed that there are no listings within the project site. The nearest hazardous materials site is an active school cleanup site at the nearby Lafayette Elementary School Expansion project site located at 952 Moraga Road, southwest or the project site. The EnviroStor ID is 60002430 and the site code is 204288.[64]

The project site currently serves as a neighborhood park and there are no existing structures on the site. The project has a General Plan land use designation of Parkland is located within the R-6 (Single-family

[64] Department of Toxic Substances Control (DTSC), EnviroStor, http://www.envirostor.dtsc.ca.gov, accessed October 3, 2017.

Residential District - 6) Zoning District. The nearest educational facilities to the project site are Lafayette Elementary School and M.H. Stanley Middle School, which are located 0.5-mile southwest of the project site.

The Sandhill Heliport is located 7 miles northwest of the project site, John Muir Memorial Hospital Heliport is located 5.5 miles northeast of the project site, and Buchanan Field Airport is located 9 miles northeast of the project site.

The project site is also located within a Local Responsibility Area (LRA)-Incorporated and is not mapped as a Fire Hazard Severity Zone by the California Department of Forestry and Fire Prevention.[65] The City adopted an Emergency Operations Plan[66] (EOP) in March 2011. The EOP identifies the City emergency planning, organization, and response policies and procedures.

Discussion

a) Would the proposed project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Small amounts of potentially hazardous materials associated with heavy mechanical equipment, for example diesel, gasoline, or other automotive fluids, may be used during future construction of the proposed project, or during routine maintenance. However, standard precautions and best management practices to prevent spills would be used to minimize exposure to people and the environment. Further, due to the small scale of the proposed project, in the event of a spill the amount of such products would be in small quantities. Thus, the impacts to the public and environment from hazardous materials would be limited. Accordingly, impacts would be *less than significant* and this issue will not be discussed in the EIR.

b) Would the proposed project 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?

As discussed above under Criterion (a) due to the small scale of the proposed project, in the event of a spill the amount of such products would be in small quantities. In addition, standard precautions and best management practices to prevent spills would be used to minimize exposure to people and the environment. Therefore, the potential impact involving the released of these materials into the environment is *less than significant* and this issue will not be discussed in the EIR.

[65] California Department of Forestry and Fire Prevention (CAL FIRE), 2008. Contra Costa County, http://frap.fire.ca.gov/webdata/maps/contra_costa/fhszl_map.7.pdf, accessed October 3, 2017.

[66] City of Lafayette, 2011. City of Lafayette Emergency Operations Plan.

c) Would the proposed project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?

The nearest educational facilities to the project site are Lafayette Elementary School and M.H. Stanley Middle School, which are located 0.5 mile southwest of the project site. The proposed project would not involve the storage, handling, or disposal of hazardous materials in sufficient quantities to pose a significant risk to the public. Thus, there would be *no impact* related to hazardous emissions or hazardous material handling within one-quarter mile of a school and this issue will not be discussed in the EIR.

d) Would the proposed project be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.[67] Development of proposed project, therefore, would not create a significant hazard to the public or the environment by virtue of location in proximity to a known hazardous materials site. Accordingly, impacts would be less *than significant* and this issue will not be discussed in the EIR.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The Sandhill Heliport is located 7 miles northwest of the project site, John Muir Memorial Hospital Heliport is located 5.5 miles northeast of the project site, and Buchanan Field Airport is located 9 miles northeast of the project site. Given the distance from these airports and the project's proposal to construct active educational play areas within an existing neighborhood park, the project would not be subject to any airport safety hazards. The project would also not have an adverse effect on aviation safety or flight patterns. Thus, there would be *no impact* related to public airport hazards and this issue will not be discussed in the EIR.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

As previously stated, the project site is not located within 2 miles of a public airport or public use airport or within an airport land use plan. Therefore, *no impact* would occur and this issue will not be discussed in the EIR.

[67] Department of Toxic Substances Control (DTSC), http://www.envirostor.dtsc.ca.gov/public, accessed August 9, 2016. The nearest listed hazardous materials site is the Allied-Signal, Incorporated site located on Moffet Park Drive, roughly 600 feet southwest of the project site. This site identified as an inactive site with a needs-evaluation status.

g) Would the proposed project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

California Code of Regulations, Title 24, also known as the California Building Standards Code, contains the California Fire Code (CFC), included as Title 24, Part 9. Updated every three years, the CFC includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. The CFC has been adopted by the LMC as Title 3, Building Regulations, Chapter 3-5, Fire Safety.

The proposed project would not change any existing access points for emergency vehicles during both the construction and operational phases of the project. Compliance with the provisions of the CFC and the California Building Code (CBC) (described above), would ensure that development of the proposed project would have *no impact* and would not interfere with an adopted emergency response plan or emergency evacuation plan. This issue will not be discussed in the EIR.

h) Would the proposed project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The California Department of Forestry and Fire Protection (CalFire) has mapped the relative fire risk in areas of significant population, based on development density and proximate fire threat. Levels of risk are indicated as "Little or No Threat," "Moderate," "High," "Very High" and "Extreme." The project site is not located in an area designated by CalFire as Extreme or Very High threat to people from wildland fire.[68] The project site is located within a residential neighborhood and is not surrounded by woodlands or vegetation, other than what is present in the park itself. Thus, the proposed project would not result in significant risk of loss, injury, or death resulting from wildland fire. Accordingly, *no impact* would occur and this issue will not be discussed in the EIR.

X. Hydrology and Water Quality

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	❒	❒	■	❒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a significant lowering of the local groundwater table level?	❒	❒	❒	■

[68] California Department of Forestry and Fire Protection (CAL FIRE), 2008. Very High Fire Hazard Severity Zones in LRA, http://frap.fire.ca.gov/webdata/maps/contra_costa/fhszl_map.7.pdf, accessed October 3, 2017.

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	❒	❒	■	❒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	❒	❒	■	❒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems?	❒	❒	■	❒
f) Otherwise substantially degrade water quality?	❒	❒	■	❒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	❒	❒	❒	■
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	❒	❒	❒	■
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	❒	❒	■	❒
j) Inundation by seiche, tsunami, or mudflow?	❒	❒	❒	■

Existing Conditions

The project site is within the Las Trampas Creek Watershed, which encompasses approximately 27 square miles. This watershed is part of the larger Walnut Creek Watershed, which comprises about 150 square miles. Lafayette Creek drains the southeastern slopes of the Briones Hills and passes through Lafayette about 315 feet south of the project site. Water quality in Lafayette, including the project site, is regulated by the Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) permit (MRP) issued for the San Francisco Bay Area Region. Stormwater quality is regulated through the City of Lafayette Municipal Code to ensure compliance with C.3 provisions and MRP requirements.

To minimize construction impacts, projects that disturb one or more acres of land are required to comply with the NPDES General Construction Permit (GCP) as well as prepare a SWPPP that requires the incorporation of BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction.

Water quality in stormwater runoff is regulated locally by the Contra Costa Clean Water Program (CCCWP), which include the C.3 provisions set by the San Francisco Bay Regional Water Quality Control Board (RWQCB) in the MRP. The RWQCB recently mandated that Contra Costa County and the

municipalities within the county impose new more stringent requirements to control runoff from development projects within their jurisdiction. As part of the permitting process, project applicants must submit a Stormwater Control Plan (SCP) that describes a framework for the management of stormwater discharges. Additionally, the RWQCB and CCCWP added Provision C.3, New Development and Redevelopment Performance Standards, that establishes specific thresholds and criteria for implementation of stormwater treatment measures.

The CCCWP has also developed a Hydrograph Modification Management Plan (HMP) which applies to post-October 2006 projects that create and/or replace one acre or more of impervious area. Under the HMP, a flow control standard is established so that projects do not result in a net increase in runoff as compared to pre-project conditions. Compliance can be demonstrated by various methods; one method is to implement best management practices or Low Impact Development (LID) measures using designated procedures and tools such as the Integrated Management Practices (IMP) Sizing Calculator. Since the proposed project would not create and/or replace more than 2,500 square feet or more of impervious surface, it would not be subject to C.3 provisions of the MS4 permit.

The City of Lafayette and the proposed project are not located within a designated groundwater basin, as identified by the San Francisco Bay RWQCB. The proposed project is within the service area of the EBMUD, which receives its water supply primarily from surface water and the Molekumne River.

According to dam inundation maps compiled by the California Office of Emergency Services (CalOES), the project site is located in a dam inundation zone.[69] The project site is not within a Federal Emergency Management Agency (FEMA)-designated 100-year floodplain.[70]

Discussion

a) Would the proposed project violate any water quality standards or waste discharge requirements?

Clearing, grading, and construction activities associated with adoption and implementation of the proposed project have the potential to impact water quality through soil erosion, which can increase the amount of silt and debris carried in runoff. The project would result in 1,586 square feet of impervious surface, distributed throughout the 0.6-acre site, as described in Chapter 3, Project Description, of this Initial Study. The proposed project would be required to comply with LMC Section 716-2.604, Prohibited action – Grading, which prohibits any person from grading, whether or not a permit is required, so that dirt, soil, rock, debris, or other material washed, eroded, or moved from the property by natural or artificial means does not create a public nuisance or hazard.[71] In addition, the project would be subject to LMC Chapter 5-4, Stormwater Management and Discharge Control, which requires the development and implementation of Stormwater Pollution Prevention Plans (SWPPP) and best management practices in

[69] California Office of Emergency Services (Cal OES), 2009. Dam Inundation Registered Images and Boundary Files in Shape File Format. Version DVD 3, April.
[70] Federal Emergency Management Agency (FEMA), 2009. FEMA Flood Insurance Rate Map (FIRM) No. 06013C0269F.
[71] Title 3, Building Regulations, Chapter 3-7, Grading, Section 716-2.604, Prohibited Action – Grading.

order to control erosion at construction sites.[72] With implementation of these measures, water quality impacts during construction would be *less than significant* and this issue will not be discussed in the EIR.

Similarly, the project would not be subject to the C.3 provisions of the MS4 permit, since it will not create or replace 2,500 square feet or more of impervious surface. Therefore, preparation of a Stormwater Management Plan and installation of stormwater treatment measures would not be required. However, the City of Lafayette has the discretionary power to require best management practices as a condition of approval, which may include minimization of impervious surfaces, treatment of stormwater runoff by collection, detention, or infiltration, efficient irrigation of landscaped areas, and source control measures. With implementation of applicable best management practices and the minimal amount of proposed impervious surfaces, the proposed project would not violate storm discharge standards and the impact would be *less than significant* and this issue will not be discussed in the EIR.

Given the small size of the project it would not be required to comply with federal, State, and local regulations. Thus, the operation and maintenance activities associated with the project would result in minimal impacts on water quality. Accordingly, water quality impacts associated with construction and operational aspects of the project would be *less than significant* and this issue will not be discussed in the EIR.

b) Would the proposed project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a significant lowering of the local groundwater table level?

The project would be connected to municipal water supplies and does not propose any wells or use of on-site groundwater supplies. Although the City does obtain a portion of its municipal supply from City groundwater wells, the water demand for this project would be minimal and the 2015 Urban Water Management Plan (URMP) indicates that there are sufficient water supplies for normal, single-dry, and multiple-dry years through 2035. While the project would include construction of impervious surfaces on the project site which could limit groundwater recharge in the area, the small size of the project and limited impervious surfaces would preclude the potential for a net deficit in aquifer volume or a significant lowering of the local groundwater table level. Accordingly, *no impacts* to groundwater supplies or groundwater recharge would occur and this issue will not be discussed in the EIR.

c) Would the proposed project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

The proposed project would not alter the course of a stream or river. Although the project would result in an increase in 1,586 square feet of impervious surfaces, 95 percent of the project the site would remain pervious. The project is not subject to the C.3 provisions of the MS4 permit which require storm-water treatment or control measures, because of the small amount of impervious surfaces that would be created. However, erosion and sedimentation would be controlled during construction by the

[72] Title 5, Health and Sanitation, Chapter 5-4, Stormwater Management and Discharge Control.

implementation of construction best management practices. Because most of the project site would remain with pervious surfaces, stormwater runoff from the trails and buildings would drain via sheetflow to adjacent vegetated or undeveloped areas where it would infiltrate into the soil. Therefore, post-development stormwater flow rates are not expected to be significantly different from pre-development flow rates and the potential for flooding is less than significant. Similarly, the introduction of 1,586 square feet of impervious surface would not generate amounts of stormwater runoff that would exceed the capacity of existing stormwater drainage systems. Accordingly, the potential for erosion, siltation, flooding, or exceedance of the storm drain system's capacity would be *less than significant* and this issue will not be discussed in the EIR.

d) Would the proposed project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

The proposed project would not result in the alteration of the course of a stream or river. As discussed above, implementation of the proposed project would not create or replace 2,500 square feet or more of impervious surface. Because most of the project site would remain with pervious surfaces, stormwater runoff from the trails and buildings would drain via sheetflow to adjacent vegetated or undeveloped areas where it would infiltrate into the soil. Therefore, post-development stormwater flow rates are not expected to be significantly different from pre-development flow rates and the potential for flooding is *less than significant.* This issue will not be discussed in the EIR.

e) Would the proposed project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems?

As discussed under Criterion (c) above, the introduction of 1,586 square feet of impervious surface to the project site would not generate amounts of stormwater runoff that would exceed the capacity of existing stormwater drainage systems. Therefore, impacts would be less than significant and this issue will not be discussed in the EIR.

f) Would the proposed project otherwise substantially degrade water quality?

As discussed under Criterion (a) above, given the small size of the project it would not be required to comply with federal, State, and local regulations. Thus, the operation and maintenance activities associated with the project would result in minimal impacts on water quality. Accordingly, water quality impacts associated with construction and operational aspects of the project would be *less than significant* and this issue will not be discussed in the EIR.

g) Would the proposed project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Las Trampas Creek, which runs along the western portion of the project site, is located within a 100-year floodplain as mapped by FEMA, however, the project site is not and does not include housing.[73]

[73] City of Lafayette General Plan, Chapter IV, Safety, Map IV-4, Flood Zones.

Therefore, housing will not be constructed within a 100-year floodplain. Similarly, given the small nature of the proposed play structures, the proposed project would not impede or redirect flood flows. As a result, *no impact* would occur and this issue will not be discussed in the EIR.

h) Would the proposed project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

As discussed under Criterion (g) above, Las Trampas Creek is located within a 100-year floodplain as mapped by FEMA; however, given the small nature of the proposed amenities, project implementation would not impede or redirect flood flows. Therefore, there would be *no impact* and this issue will not be discussed in the EIR.

i) Would the proposed project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

According to dam inundation maps compiled by the California Office of Emergency Services (CalOES), the project site is located in a dam inundation zone,[74] however, a two-phase safety review conducted between 2005 and 2008 demonstrated that the dam is stable and safe for both long-term static and short-term seismic conditions, including the Maximum Credible Earthquake (MCE).[75,76]The risk of dam failure is therefore very low, and as a result, impacts from buildout the proposed project would be *less than significant*. This issue will not be discussed in the EIR.

j) Would the proposed project be inundation by seiche, tsunami, or mudflow?

The project site is located 10 miles inland from the San Francisco Bay and therefore outside of the tsunami inundation zone as mapped by ABAG.[77] Additionally, there are no slopes with gradients of 15 percent or more adjacent to the site and the site is not in a debris flow source area.[78] Therefore, *no impact* related to inundation by seiche, tsunami, or mudflows would occur and this issue will not be discussed in the EIR.

[74] California Office of Emergency Services (Cal OES), 2009. Dam Inundation Registered Images and Boundary Files in Shape File Format. Version DVD 3, April.

[75] Geotechnical Environmental and Water Resources Engineering, 2005. Dynamic Stability Review of Lafayette Dam Report.

[76] East Bay Municipal Utility District (EBMUD), Engineering & Construction Department, 2008. Supplemental Geotechnical Investigation Report, Lafayette Reservoir Dam.

[77] Association of Bay Area Governments (ABAG), Earthquakes and Hazards Program, Tsunami Evacuation Area Map, http://gis.abag.ca.gov/website/Hazards/?hlyr=tsunami, accessed October 3, 2017.

[78] Association of Bay Area Governments (ABAG), Earthquakes and Hazards Program, Landslide and Debris Flow Hazard Map, http://gis.abag.ca.gov/website/Hazards/?hlyr=northSanAndreas&co=6081, accessed October 3, 2017.

XI. Land Use and Planning

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

Existing Conditions

The project site is bounded by residential housing to the north, 4th Street to the east, Moraga Boulevard to the south, and Las Trampas Creek to the west. The project is located within a developed area of the city and is surrounded by residential development.

Adoption and implementation of the project site would result in future development of an ADA accessible impervious concrete pathway, two children's educational play structures, and a passive area with site furnishings. The project site is comprised of four parcels and currently serves as a passive neighborhood park. There are two picnic tables, a drinking fountain, and doggie pots[79] in the project site. These elements would remain on the project site and one of the existing picnic tables would be relocated. There are no permanent buildings on the project site, thus, no demolition activities would occur.

The project has a General Plan land use of Parkland and is located within the R-6 Zoning District. The Parkland land use designation is primarily intended for existing and proposed active and passive parks. The R-6 zoning district is reserved for detached single-family dwelling units, crop and tree farming, publicly owned parks and playgrounds, a home occupation, and animal farming.

Discussion

a) Would the proposed project physically divide an established community?

An example of a project that would divide an existing community would be a project that involved a continuous right-of-way, such as a roadway that would divide a community and impede access between parts of the community. The proposed project would involve construction of active play structures within an existing neighborhood park and would not divide any existing established community. Accordingly, *no*

[79] Doggie pots are places to get and dispose of plastic bags.

impact with respect to the division of an established community would occur and this issue will not be discussed in the EIR.

b) Would the proposed project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed project would have a significant impact if it would conflict with community goals as expressed in adopted plans, policies, or regulations. The proposed project complies with the General Plan land use designation requirement as well as the Zoning district requirements, however, adoption and implementation of the project would require minor amendments to the General Plan, the Parks and Recreation Facilities Master Plan, and Leigh Creekside Park Master Plan in order to re-designate the project site from a "passive" to an "active" neighborhood park in order to maintain consistency throughout all planning documents. The proposed project would be consistent with the following goals and polices in Chapter 1, Land Use (LU), Chapter III, Open Space and Conservation (OS), and Chapter IV, Parks, Trails and Recreation (P), and of the Lafayette General Plan and referenced in the Parks and Recreation Facilities Master Plan:

- Goal LU-2: Ensure that development respects the natural environment of Lafayette. Preserve the scenic quality of ridgelines, hills, creek areas, and trees.
- Goal OS-1: Preserve areas of visual prominence and special ecological significance as Open Space.
- Goal OS-5: Preserve and protect creeks, streams, and other watercourses in their natural state.
- Goal P-1: Provide an attractive system of parks, trails and recreation facilities throughout the City to meet the needs and interests of all ages and capabilities.
  - Policy P-1.2: Park Planning and Design - Develop a system of high quality, well designed parks and recreation facilities that take advantage of the City's semi-rural character.
  - Policy P-1.3: Parkland Standard: Provide parks and recreation facilities in accordance with standards and practices appropriate to a semi-rural and largely built-out residential community.

As discussed above, the proposed project is in compliance with the Lafayette General Plan land use designation and the Lafayette Zoning Code regulations. In addition, the project would be consistent with the aforementioned General Plan goals and policies. Therefore, the proposed project would not conflict with community goals as expressed in adopted plans, policies, or regulations and impacts would be *less than significant*. This issue will not be discussed in the EIR.

c) Would the proposed project conflict with any applicable habitat conservation plan or natural community conservation plan?

There are no adopted habitat conservation plans or natural community conservation plans that would apply to the proposed project, and therefore, there would be *no impact* with regard to conservation plan conflicts and this issue will not be discussed in the EIR.

XII. Mineral Resources

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	❒	❒	❒	■
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	❒	❒	❒	■

Existing Conditions

The California Department of Conservation, Geological Survey (CGS) classifies lands into Aggregate and Mineral Resource Zones (MRZs) based on guidelines adopted by the California State Mining and Geology Board, as mandated by the Surface Mining and Reclamation Act of 1974. These MRZs identify whether known or inferred significant mineral resources are present in areas. Lead agencies are required to incorporate identified MRZs resource areas delineated by the State into their General Plans.[80] The City of Lafayette has no General Plan Land Use designation for mineral resources.[81]

Discussion

a) Would the proposed 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?

As described above, the City of Lafayette has no General Plan Land Use designation for mineral resources. Therefore, there would be *no impact* with regard to the loss of a valuable mineral resource and this issue will not be discussed in the EIR.

b) Would the proposed 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?

As discussed above under Criterion (a), the project site is not identified as containing mineral deposits. Accordingly, the proposed project would result in no impact and this issue will not be discussed in the EIR.

[80] Public Resources Code Section 2762(a)(1).
[81] City of Lafayette, 2009. General Plan, Chapter I, Land Use, pages I-7 to I-9.

XIII. Noise

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	■	❒	❒	❒
b) Exposure of persons to or generation of excessive groundborne vibration or ground borne noise levels?	■	❒	❒	❒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	■	❒	❒	❒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	■	❒	❒	❒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	❒	❒	❒	■
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	❒	❒	❒	■

Noise is defined as unwanted sound, and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal government, State of California, and City of Lafayette have established criteria to protect public health and safety and to prevent disruption of certain human activities.

Terminology and Noise Descriptors

The following are brief definitions of terminology used in this section:

- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- **Decibel (dB).** A unitless measure of sound that is calculated on a logarithmic scale. The calculations involve the squared ratio of sound pressure amplitude to a reference pressure amplitude. The reference pressure is 20 micropascals.
- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- **Energy-Equivalent Noise Level (L_{eq}).** The mean of the noise level, energy-averaged over the measurement period; regarded as an average level.

- **Day-Night Level (L_{dn}).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10 p.m. to 7 a.m.
- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period with 5 dB added to the sound levels occurring during the period from 7:00 p.m. to 10:00 p.m. and 10 dB added to the sound levels occurring during the period from 10:00 p.m. to 7:00 a.m. For general community/ environmental noise, CNEL and L_{dn} values rarely differ by more than 1 dB. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and interchangeable.
- **Statistical Sound Level.** Also known as the n-exceedance Sound Level, L_n. The fast-response, A-weighted noise levels equaled or exceeded by a fluctuating sound level for n-percent of a stated time period; for example, 1 percent, 10 percent, 50 percent, and 90 percent of the stated period (denoted as L_{01}, L_{10}, L_{50}, and L_{90}). The L_{10} level is commonly called the 'intrusive sound level' and is near the maximum level in that time period, while the L_{90} is commonly called the 'residual sound level' and is near the minimum level in that period. The L_{50} (or median sound) level is when the measured noise environment is above that value half of the time and below that value the other half of the time. The L_{50} (or median sound) level is different than the energy-average (L_{eq}) sound level. Community noise standards are often written in terms of levels exceeded for more than 30 minutes of any given hour (i.e., the L_{50} sound level), exceeded for more than 15 minutes of any given hour (i.e., the L_{25} sound level), exceeded for more than 5 minutes of any given hour (i.e., the $L_{8.3}$ sound level), exceeded for more than 1 minute of any given hour (i.e., the $L_{1.6}$ sound level), and exceeded at any time within any given hour (i.e., the L_0 or L_{max} sound level).
- **Sensitive Receptor.** Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.
- **Vibration Decibel (Vdb).** A unitless measure of vibration that is calculated on a logarithmic scale. The calculations involve the squared ratio of vibration velocity amplitude to a reference velocity amplitude. The reference velocity is 1 micro-inch/second.

Existing Conditions

The proposed project is located within an existing residential neighborhood. The nearest sensitive uses are single-family residences approximately 95 feet to the north of the center of the project site. There are additional single-family residences approximately 115 feet from the center of the project site, across Moraga Boulevard and 4th Street to the south and east.

There are no public airstrips in the vicinity of the proposed project. There are two private heliports within the vicinity of the proposed project. The project site is located 7 miles southeast of the Sandhill Heliport, 5.5 miles southwest of the John Muir Memorial Hospital Heliport, and 9 miles southwest of the Buchanan Field Airport.

Threshold of Significance

The analysis of noise impacts considers project-related construction phase noise, as defined by the City of Lafayette, State of California, and the Federal Transit Administration (FTA). The proposed project would have a significant adverse noise impact if the project would result in any of the following:

- The LMC Section 5-208(d), special provisions, limits the hours of permitted construction to the hours of 8:00 a.m. to 8:00 p.m. Monday through Saturday, and between 10:00 a.m. to 6:00 p.m. on Sundays and legal holidays with a valid city permit, provided that such construction activities do not exceed 80 dBA at the nearest affected property or individual equipment items do not exceed 83 dBA at 50 feet. Per LMC Section 5-207(e),[82] construction equipment that does not create a noise disturbance, as defined by the stationary noise limits, construction activities can operate between 7:00 a.m. and 10:00 p.m.
- The Noise Element of the City's General Plan sets forth several policies and programs to assess and control environmental noise. These policies and programs establish indoor and outdoor noise standards for residential uses. For ambient noise of up to 55 dBA L_{dn}, the development of multi-family residential projects are considered "normally acceptable" and for ambient noise levels ranging from 55 dBA L_{dn} to 75 dBA L_{dn}, development of multi-family residential projects is considered "conditionally acceptable." Under "conditionally acceptable" conditions, the specified land use may be permitted only after a detailed analysis of the noise reduction requirements and needed noise insulation features included in the design.
- Policy N-1.3 of the Noise Element, dealing with Noise and Land Use Compatibility Standards, was enacted to ensure that all new noise-sensitive development proposals be reviewed with respect to Map VII-1, Noise and Land Use Compatibility Standards, of the Lafayette General Plan. Noise exposure shall be determined through actual on-site noise measurements.
- Program N-1.2.2 includes criteria to evaluate noise impacts from new developments to sensitive uses. Substantial increase would result if a project would:
  - Cause the L_{dn} in existing residential areas to increase by 3 dB or more; or
  - Cause the L_{dn} in existing residential areas to increase by 2 dB or more if the L_{dn} would exceed 70 dB; or
  - Cause the L_{dn} resulting exclusively from project-generated traffic to exceed an L_{dn} of 60 dBA at any existing residence.

Discussion

a) Would the proposed project expose people to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The types of uses associated with the operation of the proposed project are not typically considered to generate excessive noise. However, due to the close proximity of single-family residences to the north,

[82] City of Lafayette, 2011. City of Lafayette Municipal Code.

east, and south, of the project site noise impacts are considered to be potentially significant and this issue will be discussed further in the EIR.

b) Would the proposed project expose people to or generation of excessive groundborne vibration or ground borne noise levels?

Pakland uses, such as what is proposed by the project, are not typically associated with the ongoing generation of excessive levels of vibration or groundborne noise from operations. Furthermore, construction activities would not require pile driving or the use of other vibration causing equipment during construction that may be perceptible at nearby sensitive receptors. However, due to the close proximity of the single-family residences to the north, east, and south, of the project site, vibration impacts may be *potentially significant* until the need and this issue will be discussed further in the EIR.

c) Would the proposed project create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Pakland uses, such as those proposed by the project, are not typically associated with excessive, ongoing operations-related noise that would lead to substantial permanent increases in ambient noise levels. Furthermore, the proposed project would generate minimal increases in traffic flows in comparison to the existing conditions and noise from the project would generally be same as the current conditions. However, because there is the potential for operation of the proposed project to increase ambient noise levels, impacts under this criterion may be *potentially significant* and this issue will be discussed further in the EIR.

d) Would the proposed project create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Parkland uses, such as those proposed by the project, are not typically associated with excessive operations-related noise that would lead to substantial temporary or periodic increases in ambient noise levels. Nevertheless, construction and operation associated with the proposed project could lead to short-lived generation of excessive noise levels that could result in temporary or periodic increases to ambient noise levels. Therefore, the impacts under this criterion may be *potentially significant* this issue will be discussed further in the EIR.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

There are no public airstrips in the vicinity of the proposed project. The project does not propose any land uses that would expose people (i.e., park visitors) to excessive noise from aircraft using a public use airport. Accordingly, there would be *no impact* and this issue will not be discussed in the EIR.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

There are two private heliports within the vicinity of the proposed project. The project site is located 7 miles southeast of the Sandhill Heliport, 5.5 miles southwest of the John Muir Memorial Hospital Heliport, and 9 miles southwest of the Buchanan Field Airport. Therefore, there would be *no impact* with regard to exposing people residing or working in the vicinity of the project site to excessive noise levels related to private airstrips. This issue will not be discussed in the EIR.

XIV. Population and Housing

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

Existing Conditions

According to the US Census Bureau's decennial data, the City of Lafayette had approximately 9,845 housing units and 25,843 residents in 2015.[83] In 2017, the number of housing units in the City of Lafayette increased to 9,932 housing units and the number of residents decreased to 25,199 residents, according to the California Department of Finance Population and Housing Estimate.[84] The estimated average household size is 2.77 persons.[85] The estimated vacancy rate in January 2017 for Lafayette housing units was 5.2 percent, which has been steady since 2010, only going down to 4.4 percent in 2010. This pattern coincides with the Contra Costa County's vacancy rate in 2016 at 4.1 percent. [86] In 2015, approximately 73 percent of housing units were occupied by owners and 26 percent were renter occupied.[87]

[83] US Census Bureau, 2010 Census, American Fact Finder, Community Facts, http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml, accessed October 3, 2017.

[84] California Department of Finance, 2017. E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011- 2017, http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/, accessed on October 3, 2017.

[85] Association of Bay Area Governments (ABAG), Projections 2013, Subregional Study Area Table. Contra Costa County. Persons Per Household 2020.

[86] California Department of Finance (CDF), 2014. E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011- 2016, http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/, accessed on October 3, 2017.

[87] US Census Bureau, 2010 Census, American Fact Finder, Community Facts, http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml, accessed October 3, 2017.

The project site currently serves as a neighborhood park and no housing units or residents currently exist on the project site.

Discussion

a) Would the proposed project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Adoption and implementation of the proposed project would result in future construction of two children's educational play structures, ADA accessible impervious pathways, and site furnishings on the project site. The proposed project would not involve new housing or employment centers; thus, the project would not induce substantial population growth in the area. Therefore, implementation of the proposed project would result in no impact related to population growth. The project site does not contain any existing housing; thus, no housing or residents would be displaced. Accordingly, *no impact* would occur and this issue will not be discussed in the EIR.

b) Would the proposed project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

As discussed above, the project site does not contain any residential units and implementation of the proposed project would not displace housing or people. Therefore, no impact would occur and this issue will not be discussed in the EIR.

c) Would the proposed project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No residents currently occupy the project site. Therefore, people would not be displaced as a result of implementation of the proposed project and this issue will not be discussed in the EIR.

XV. Public Services

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) 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:				
Fire protection?	❒	❒	❒	■

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Police protection?	❒	❒	❒	■
Schools?	❒	❒	❒	■

Existing Conditions

Fire Protection

The CCCFPD provides fire protection and Emergency Medical Service for the City of Lafayette, including the project site. The CCCFPD fire stations provide fire and emergency medical services to nine cities, including Lafayette, and the unincorporated areas of Contra Costa County.[88] The total operating budget for Fiscal Year 2016-17 is $13.2 million.[89]

The CCCFPD staff is made up of 404 personnel, including 339 uniformed personnel, with 13 Battalion Chiefs and approximately 65 civilian personnel. Each three-person firefighting crew includes a paramedic. In addition to fire suppression and emergency medical services, overall capabilities and resources of the CCCFPD include vehicle extrication ("jaws of life"), trench rescue, water rescue, high-angle rescue, building collapse rescue, confined space rescue, fire and arson investigation, code enforcement, building plan review, and public education, such as Community Emergency Response Training. From January 1, 2014 to December 31, 2014, the CCCFPD was dispatched to 31,540 calls for service throughout its service area, of which 8,498 were rescue and emergency medical service calls.

Police Protection

The Lafayette Police Department (LPD) provides law enforcement service for the City through a contract with the Contra Costa County Sheriff's Department. There is one police station in Lafayette, located at 3675 Mt. Diablo Boulevard, located west of the project site. The LPD is also responsible for maintaining the City's Emergency Operations Center, which is located at 3491 Mt. Diablo Boulevard in the Library.

The LPD has 16 sworn officers, three reserve officers, and five non-sworn officers.[90] Using the City's 2016 population,[91] the LPD's current service ratio is 0.96 police officers per 1,000 service population.[92] The General Plan established the standard response times: a three-minute response time for all life-threatening calls and those involving criminal misconduct; and a seven minute response time for the

[88] Contra Costa County Fire Protection District (CCCFPD), http://www.cccfpd.org/fire-prevention.php, accessed October 3, 2017.

[89] Contra Costa County, Special Districts Budget Fiscal Year 2016-2017, page 31.

[90] City of Lafayette Police Department website, http://www.ci.lafayette.ca.us/index.aspx?page=107, accessed October 3, 2017.

[91] US Census Bureau, 2010 Census, American Fact Finder, Community Facts, http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml, accessed December 28, 2016.

[92] The police officer to 1,000 residents is calculated by 24 officers divided by 2016 population (24,924 population) multiplied by 1,000.

majority of non-emergency calls. However, there is no statistical data on life threatening call or calls involving criminal misconduct. At the Contra Costa County Sheriff's Office, calls are dispatched as either priority one or two, and the priority one calls include call types that do not fit into the criteria of life threatening or criminal misconduct. Actual response times depend on the nature of the call and the availability of officers to respond to calls for service.

Schools

The nearest educational facilities to the project site are Lafayette Elementary School and M.H. Stanley Middle School, which are located 0.5 mile southwest of the project site.

Discussion

a) Would the proposed 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 including, fire and police protection, schools, parks and libraries?

The primary purpose of a public services impact analysis is to examine the impacts associated with physical improvements to public service facilities required to maintain acceptable service ratios, response times, or other performance objectives. Generally, public service facilities need improvements (i.e., construction, renovation, or expansion) as demand for services increase. Increased demand is typically driven by increases in population. The proposed project would have a significant environmental impact if it would exceed the ability of public service providers to adequately serve residents, thereby requiring construction of new facilities or modification of existing facilities. As discussed in Section XIV, Population and Housing, above, the proposed project would not result in a net increase of residents at the project site or elsewhere in the region because it does not propose housing and is not major regional employer. Accordingly, the proposed project would not warrant new construction of or expansion of an existing fire, police, school, park or library facility that would serve the project site; thus, *no impact* would occur and this issue will not be discussed in the EIR.

XVI. Recreation

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	❒	❒	❒	■
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	❒	❒	❒	■

Existing Conditions

Lafayette has a 29-mile network of community trails linking neighborhoods and feeding into the regional and Lamorinda trail networks.[93] Within the city limits there are 91.3 acres of recreational space and parkland, comprised of four neighborhood parks, two community parks, one downtown park, and a community center.[94] The City of Lafayette is also surrounded by three regional park facilities; Lafayette Reservoir Recreation Area, Briones Regional Park, and Las Trampas Regional Wilderness.[95]

There are currently 3.7 acres[96] of parkland per 1,000 residents of Lafayette, which does not meet the standard of 5 acres per 1,000 residents established in the General Plan. City-owned playing fields, located at the Lafayette Community Center and Buckeye Fields, are used to capacity by youth leagues and demand is increasing.

Discussion

a) Would the proposed 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?

Adoption and implementation of the proposed project would result in the construction of an ADA accessible impervious concrete pathway, two children's educational play structures, and a passive area with site furnishings within an existing neighborhood park. This amenity would increase the quality of recreational options in the area, and thus would not result in the physical deterioration of or require the expansion of an existing facility, nor would it require the addition of new parks in Lafayette or the surrounding area. Accordingly, *no impact* would occur and this issue will not be discussed in the EIR.

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

As discussed above, the project site serves as a passive neighborhood park. Implementation of the proposed project would result in future development of two children's educational play structures, ADA accessible impervious pathways, and site furnishings on the project site. Accordingly, the project would increase the quality of recreational options in the area, and thus would not require the construction or expansion of facilities. Therefore, *no impact* would occur and this issue will not be discussed in the EIR.

[93] City of Lafayette, http://www.lovelafayette.org/visitors/trails, accessed October 3, 2017.
[94] City of Lafayette, 2009. Lafayette Parks and Recreation Facilities Master Plan, page 9.
[95] City of Lafayette, 2009. Lafayette Parks and Recreation Facilities Master Plan, page IV-1.
[96] (91.3 acres of parkland/24,924 citywide population) x 1,000 = 3.66 acres per 1,000 residents.

XVII. Transportation and Circulation

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	❒	❒	❒	■
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	❒	❒	❒	■
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	❒	❒	❒	■
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	❒	❒	❒	■
e) Result in inadequate emergency access?	❒	❒	❒	■
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	❒	❒	❒	■

The following is based on the *Transportation Impact Analysis* (TIA) for the Las Trampas Expansion Project prepared by Abrams Associates, on September 13, 2016, and supplemented by traffic and parking analyses prepared by PlaceWorks. The TIA prepared by Abrams Associates, and additional traffic and parking counts, as well as calculation worksheets prepared by PlaceWorks are included for reference in Appendix B of this Initial Study.

Existing Conditions

This section discusses existing roadways, volumes, and level of service in the vicinity of the project site. It also covers existing alternative transportation facilities that serve the area.

Roadway Network

Regional access in the vicinity of the project site is provided via Mount Diablo Boulevard and Moraga Road. Roadways in the project vicinity include Moraga Boulevard, 2nd Street/Monroe Avenue, 3rd Street, and 4th Street/Foye Drive. Primary vehicle access to the Project site is mainly provided via Moraga Boulevard. The existing circulation network within the study area is composed of arterial, collector, and local streets. Primary roadways within the study area include the following:

- Mount Diablo Boulevard is an east-west arterial street with two lanes in each direction and sections with either a center left-turn lane or dedicated left-turn lanes and raised medians. It extends from Acalanes Road on the west to Pleasant Hill Road on the east, providing access through the entire length of downtown Lafayette. At its easterly and westerly ends, Mount Diablo Boulevard connects with State Highway 24 freeway ramps.
- Moraga Road is a north-south arterial street with two lanes in each direction. It extends from Mount Diablo Boulevard in the north to Moraga Way in the south.
- Moraga Boulevard is an east-west collector street with one lane in each direction. It extends from Moraga Road on the west to Carol Lane on the east.
- 2nd Street/Monroe Avenue is a north-south local street that has one lane in each direction.
- 3rd Street is a north-south local street that has one lane in each direction, bordering the project on the west.
- 4th Street/Foye Drive is a north-south local street that has one lane in each direction. It borders the project on the east.

The City of Lafayette has established Level of Service criteria for its intersections. For this analysis, the key study intersections were evaluated:

- 4th Street/Foye Drive at Moraga Boulevard
- 2nd Street/Monroe Avenue at Moraga Boulevard
- 2nd Street at Golden Gate Way

Roadway Traffic Conditions

Roadway counts were taken on Moraga Boulevard in front of the project site between 4th Street and 3rd Street. The roadway counts were taken for a period of 24 hours on Friday, September 17, 2017 and Saturday, September 23, 2017 when schools were in session and no special events occurred. The raw and processed roadway hourly counts for Thursday, Friday and Saturday are included in Appendix B of this Initial Study. Figure 4-1 shows the two-way (eastbound and westbound) traffic volumes on Moraga Boulevard in the vicinity of the project site taken on a typical Thursday, Friday and Saturday. Table 4-1 presents the hourly traffic volumes.

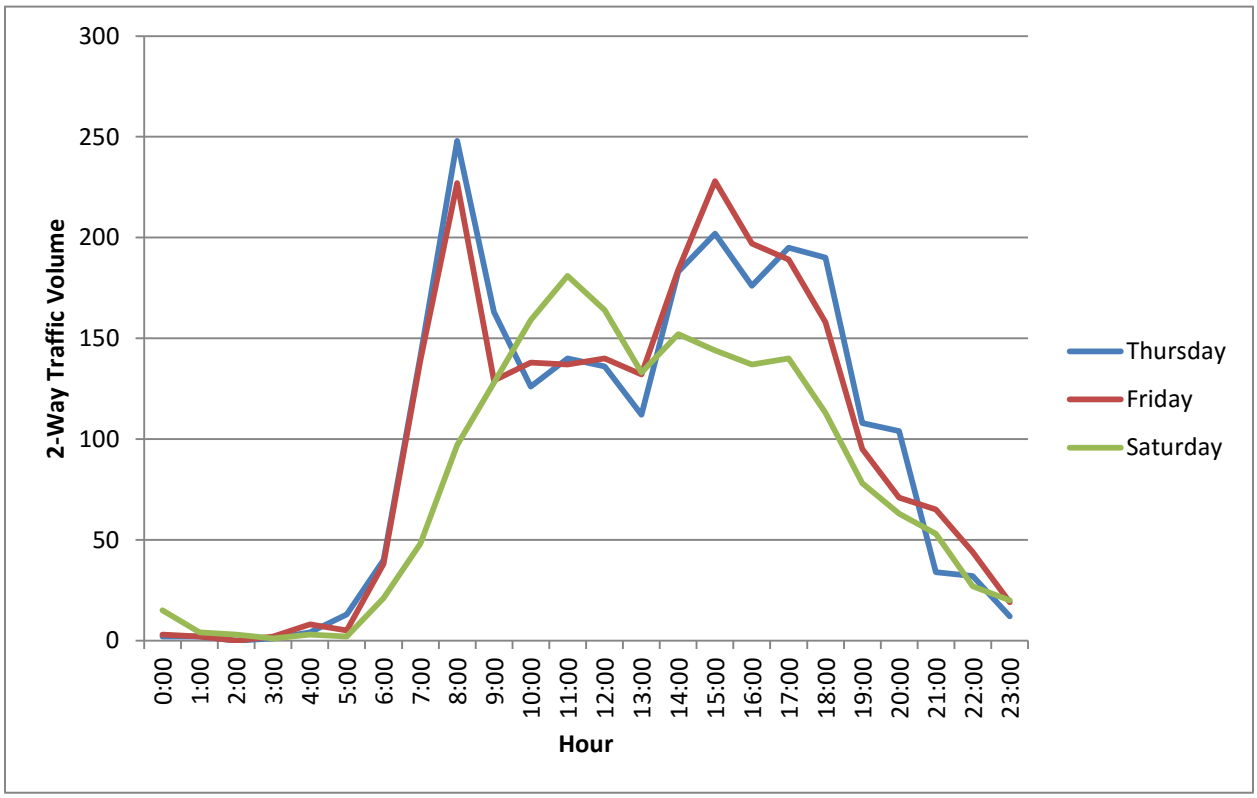
TABLE 4-1 HOURLY ROADWAY VOLUMES ON MORAGA BOULEVARD

Hour	Thursday	Friday	Saturday
0:00	2	3	15
1:00	2	2	4
2:00	0	0	3
3:00	1	2	1
4:00	4	8	3
5:00	13	5	2
6:00	40	38	21
7:00	141	139	48
8:00	248	227	97
9:00	163	129	128
10:00	126	138	159
11:00	140	137	181
12:00	136	140	164
13:00	112	132	133
14:00	183	184	152
15:00	202	228	144
16:00	176	197	137
17:00	195	189	140
18:00	190	158	113
19:00	108	95	78
20:00	104	71	63
21:00	34	65	53
22:00	32	44	27
23:00	12	19	20
Total	**2,364**	**2,350**	**1,886**

Note: Traffic counts are included in Appendix B.

On typical weekdays, the highest volumes occur between 8:00 and 9:00 am with approximately 250 vehicles, and between 3:00 pm and 4:00 pm with approximately 230 vehicles. The traffic volumes on the commuter PM peak hour are slightly lower with approximately 200 vehicles. On Saturday, the highest volumes occurred midday, peaking between 11:00 am and noon, with approximately 180 vehicles. These traffic volumes are relatively low and typical of residential street.

Figure 4-3 Hourly Traffic Volumes on Moraga Boulevard



Existing Intersection Level of Service

Existing operational conditions at study intersections were evaluated according to the requirements set forth by the City of Lafayette, Contra Costa Transportation Authority (CCTA), and the California Department of Transportation (Caltrans). The primary basis of the analysis are the peak hours level of service for the study intersections, which are between 8:00 a.m. and 9:00 a.m. and from 4:45 p.m. to 5:45 p.m., for the majority of the transportation facilities described. Throughout this analysis, these peak hours will be identified as the AM and PM peak hours, respectively.

The operational performance of a roadway network is commonly described with the term level of service. The level of service is a qualitative description of operating conditions, ranging from level of service (LOS) A (free-flow traffic conditions with little or no delay) to LOS F (oversaturated conditions where traffic flows exceed design capacity, resulting in long queues and delays.) LOS E corresponds to operations "at capacity." When volumes exceed capacity, stop-and-go conditions result and operations are designated as LOS F. Analysis of traffic operations was conducted using the 2010 Highway Capacity Manual (HCM) Level of Service methodology analyzed with Synchro software.[97] All study intersections are unsignalized. Per the HCM methodology, the overall weighted average delay was calculated at all-way-stop intersections, and the worst-case approach delay was calculated at two-way stop-controlled intersections. The level of

[97] 2010 Highway Capacity Manual, Transportation Research Board, Washington D.C., 2011

service corresponds to the delay calculated. Table 4-2 presents the LOS criteria according to the corresponding control delay.

TABLE 4-2 UNSIGNALIZED INTERSECTION LOS CRITERIA

Level of Service	Description	Average Control Delay (seconds per vehicle)
A	No delay for stop-controlled approaches	< 10.0
B	Operations with minor delays	> 10.0 to 15.0
C	Operations with moderate delays	> 15.0 to 25.0
D	Operations with some delays	> 25.0 to 35.0
E	Operations with high delays and long queues	> 35.0 to 50.0
F	Operation with extreme congestion, with very high delays and long queues unacceptable to most drivers	> 50.0

Sources: 2010 Highway Capacity Manual, Transportation Research Board, 2011.

To evaluate intersection level of service, turn movement peak hour counts conducted by Abrams Associates in May 2016 at the study intersections were utilized. These counts were taken in the typical traffic commuter hours between 7:00 and 9:00 a.m., and between 4:00 to 6:00 p.m. when schools were in session. These counts were adjusted to 2017 conditions. The adjustment was performed by comparing traffic counts taken in 2016 with the roadways counts described above, which were taken in 2017. The traffic volumes taken in 2017 are comparable to the volumes counted in 2016. While the traffic counts taken in 2017 validate the traffic counts taken in 2016, to be consistent with the typical approach for traffic studies, an increase of one percent over 2016 volumes was added to represent ambient traffic growth and calculate intersection levels of service. The turn movement volumes at the study intersections are presented in Appendix B. Table 4-3, summarizes the level of service for the study intersections. As shown in Table 4-3, the unsignalized study intersections currently operate at LOS A. It shall be noted that the intersection turn movement counts in the afternoon were taken in the commuter peak hour, which have slightly lower volumes compared to mid-afternoon traffic in the vicinity of the project. However, the difference is low (230 vs 200 vehicles on Moraga Boulevard) and lower than the 250 vehicles in the AM peak hour. Therefore, it can be concluded that the study intersections operate at acceptable level of service.

TABLE 4-3 INTERSECTION EXISTING LEVEL OF SERVICE SUMMARY

		AM		PM	
Intersection	Control	Control Delay (Seconds per Vehicle)	LOS	Control Delay (Seconds per Vehicle)	LOS
4th Street/Foye Drive at Moraga Boulevard	Two-way Stop	9.97	A	9.80	A
2nd Street/Monroe Avenue at Moraga Boulevard	All-way Stop	8.44	A	8.11	A
2nd Street at Golden Gate Way	All-way Stop	9.92	A	8.29	A

Source: *Transportation Impact Analysis* (TIA), prepared by Abrams Associates, Table 3, September 13, 2016; and intersection LOS calculation worksheets include in Appendix B.

Existing Pedestrian, Bicycle, and Transit Facilities

There are paved sidewalks on both sides of Moraga Boulevard, Monroe Avenue, and Foye Drive. There is a paved sidewalk located on the east side of 2nd Street. Marked pedestrian crosswalks are on all legs of all study intersections.

The project can be accessed via the Briones to Las Trampas Regional Trail that runs along the west side of the project site to Mount Diablo Road, which has bike lanes. Additional bike routes are planned along Moraga Boulevard and Golden Gate Way.

Bus service is provided locally by Central Contra Costa Transit Authority's (CCCTA) County Connection. One fixed-route bus line, Route 25, is available within walking distance north of the project site. The nearest bus stop is near the intersection of Golden Gate Way and Mount Diablo Boulevard.

The Project site is located approximately 1 mile east of the Lafayette BART Station platform, which is located in the median of State Highway 24 between Oak Hill Road and Happy Valley Road. The Pittsburg/Bay Point–San Francisco International Airport line serves the station seven days a week. The Lafayette BART Station has a parking structure with 1,526 spaces.

Existing Parking Facilities

A parking lot is located north of the project on the southeast corner of Mount Diablo Road at Gold Gate Way. This lot is open to the public on evenings and weekends only. Access between the parking lot and the project site is via the Briones to Las Trampas Regional Trail west of the park. In addition to this lot, curbside parking is available in the vicinity of the site. Based on site observations, there are 304 curbside parking spaces distributed throughout streets in the study area. Parking counts were taken in 30-minute intervals on a weekday (Thursday, September 14, 2017) from 5:00 p.m. to 7:00 p.m. and on a weekend (Saturday, September 23, 2017) from 1:00 p.m. to 3:00 p.m. The number of available parking spaces during the weekday, and the rate of occupancy are shown in Table 4-4 below. As shown in Table 4-4, the weekday parking occupancy near the project site was lower than the total available parking inventory with less than 30 percent overall occupancy.

Table 4-5 shows the weekend parking space availability and occupancy ratios. As shown in Table 4-5, the weekend parking occupancy near the project site was lower than the total available parking inventory with about 20 percent occupancy.

TABLE 4-4 WEEKDAY PARKING SURVEY RESULTS

			Occupancy				
#	Segment	Inventory	5:00 p.m.	5:30 p.m.	6:00 p.m.	6:30 p.m.	7:00 p.m.
A	Moraga Boulevard west of 2nd Street/ Monroe Avenue	17	6	8	7	7	10
B	Monroe Avenue south of Moraga Boulevard	35	13	13	11	11	15
C	2nd Street north of Moraga Boulevard	21	4	3	3	1	1
D	Morage Boulevard from 2nd Street/Monroe Avenue to 3rd Street	20	5	4	6	4	4
E	3rd Street north of Moraga Boulevard	19	2	3	3	3	3
F	Moraga Boulevard from 3rd Street to 4th Street/ Foye Drive	23	3	2	2	3	4
G	4th Street north of Moraga Boulevard	40	8	9	10	12	12
H	Foye Drive from Moraga Boulevard to Lana Lane	4	0	0	0	0	0
I	Lana Lane west of Foye Drive	16	5	5	5	5	5
J	Foye Drive from Lana Lane to Little Lane	9	3	3	2	3	3
K	Little Lane west of Foye Drive	18	3	3	5	4	4
L	Foye Drive from Little Lane to End	14	1	3	3	4	4
M	Moraga Boulevard from 4th Street/Foye Drive to Victoria Avenue	68	16	16	16	17	14
	Total	**304**	**69**	**72**	**73**	**74**	**79**

Source: National Data & Surveying Services, September 2017.

Discussion

a) Would the proposed project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Traffic

The project site is situated within a residential neighborhood and is defined as a neighborhood park per the Lafayette General Plan and Lafayette *Parks and Recreation Facilities Master Plan*. Neighborhood parks primarily serve a local residential area within 0.5 mile to 1 mile distance and do not include parking. Visitors primarily access neighborhood parks by foot, bicycle, and wheelchair. The Institute of Transportation Engineers (ITE) compiles trip generation rates for several land uses, including City Park. For 1 acre City parks, the daily rate is 1.89 trips per acre on weekdays, and 16.74 on Sundays. Given the total area of the existing park of less than 1 acre, including active and passive uses, and because neighborhood parks primarily serve a local residential area, the number of new trips would be nominal.

TABLE 4-5 WEEKEND PARKING SURVEY RESULTS

			Occupancy				
#	Segment	Inventory	1:00 p.m.	1:30 p.m.	2:00 p.m.	2:30 p.m.	3:00 p.m.
A	Moraga Boulevard west of 2nd Street/ Monroe Avenue	17	13	12	12	13	11
B	Monroe Avenue south of Moraga Boulevard	35	9	11	10	9	9
C	2nd Street north of Moraga Boulevard	21	1	1	1	2	2
D	Moraga Boulevard from 2nd Street/Monroe Avenue to 3rd Street	20	4	3	3	3	4
E	3rd Street north of Moraga Boulevard	19	1	1	1	1	1
F	Moraga Boulevard from 3rd Street to 4th Street/ Foye Drive	23	4	4	3	1	3
G	4th Street north of Moraga Boulevard	40	7	6	7	6	9
H	Foye Drive from Moraga Boulevard to Lana Lane	4	0	0	0	0	0
I	Lana Lane west of Foye Drive	16	5	5	4	4	4
J	Foye Drive from Lana Lane to Little Lane	9	1	1	1	1	1
K	Little Lane west of Foye Drive	18	6	6	7	6	7
L	Foye Drive from Little Lane to End	14	1	3	3	4	4
M	Moraga Boulevard from 4th St/Foye Drive to Victoria Avenue	68	16	16	16	17	14
	Total	**304**	**68**	**69**	**68**	**67**	**69**

Source: National Data & Surveying Services, September 2017.

However, for a conservative approach, this Initial Study assumes the proposed project would generate 1.89 trips on weekdays and 16.74 trips on Sundays. As shown in Table 4-3 above, the intersections in the vicinity of the project currently operate at LOS A. Overall vehicle trips within the city would not increase substantially in the long term due to the proposed project. Accordingly, project operation would have minimal impacts on congestion management programs for Contra Costa County roads. In the short-term, during proposed project construction, construction employees and equipment would be brought to the site, and truck trips to construction material to the project site would occur; however, vehicle trips related to delivery of construction equipment would be considered short-term activities that would not significantly increase traffic congestion. Given that all intersections operate at the best possible LOS and the project would not generate a nominal number of new vehicular trips, impacts would be *less than significant*. This issue will not be discussed in the EIR.

Parking

As discussed above, neighborhood parks primarily serve a local residential area within 0.5-mile to 1-mile distance. Daily visitors primarily access the site by foot, bicycle, and wheelchair. Adoption and

implementation of the proposed project would result in future development of development of two children's educational play structures, ADA accessible impervious pathways, and site furnishings at Leigh Creekside Park. This would introduce a total of 1,586 square feet of impervious surface to the project site. The Institute of Transportation Engineers (ITE) compiles parking generation rates for several land uses in its *Parking Generation*, 4th Edition and includes parking data for City Parks. Parking data is shown in Tables 4-3 and 4-4 above. According to the ITE Parking Generation data, the highest observed parking demand was 5.1 vehicles per acre of park area. Given the total area of the existing park of less than 1 acre, including active and passive uses, and because proposed enhancements are intended to serve the families within walking distance to the project site,[98] the parking demand is expected to be less than five vehicles.

As shown on Tables 4-4 and 4-5, there is plenty of parking availability in the vicinity of the site. The streets in the immediate vicinity of the project site (Moraga Boulevard, Monroe Avenue, 3rd Street, and Second Street) all have sufficient parking spaces to accommodate the parking demand of five spaces that would result from the project and would not result in a shortage of parking in the area. Given the parking availability in the area, and that the project would generate a nominal increase in parking demand in the area, impacts would be *less than significant*. This issue will not be discussed further in the EIR.

b) Would the proposed project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

The CCTA is responsible for managing the county's transportation sales tax program and providing countywide transportation planning. CCTA is also the county's designated Congestion Management Agency and is responsible for implementing the Congestion Management Program (CMP), which is updated every two years. Each CMP must contain several components, including traffic level-of-service standards for freeway segments and standards for CMP Monitoring Intersections on principal arterials. Consistent with the CMP legislation, the Authority establishes the level-of-service standards for the CMP network and Routes of Regional Significance. The most recent CMP was adopted in 2013. The CCTA CMP allows for LOS E for the CMP network.

The study intersections are not included in the CMP. The nearest CMP network facility is SR 24, located approximately 1,000 feet north of the project site. As discussed above under Criterion (a), all study intersections would continue to operate at LOS A. Therefore, the proposed project would not conflict with the CMP, and impacts would be *less than significant*. This issue will not be discussed further in the EIR.

c) Would the proposed project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The project site is located 7 miles southeast of the Sandhill Heliport, 5.5 miles southwest of the John Muir Memorial Hospital Heliport, and 9 miles southwest of the Buchanan Field Airport. The proposed project would be below the tree canopy at its highest point; thus, would not be of sufficient height to interfere with typical aircraft operations, the project would not result in changes to aircraft patterns in terms of

[98] James Dixon Architect, 2017. *Leigh Creekside Park Amended Master Plan for the City of Lafayette,* page 1.

location. The project would not itself generate air traffic; therefore, *no impact* would occur and this issue will not be discussed in the EIR.

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

The proposed project would not make modifications to sidewalks, roadways, and would not include new site access driveways. Access to the park would continue to take place via sidewalks on Moraga Boulevard and 4th Street. Paved sidewalks and marked crosswalks are present at the intersections of Moraga Boulevard at 4th Street and Moraga Boulevard at 3rd Street. No hazardous design features or incompatible uses on local roads resulting in hazards would result with implementation of the project. No emergency access routes would be affected, nor does the project create obstructions to such routes. Accordingly, *no impact* would occur and this issue will not be discussed in the EIR.

e) Would the proposed project result in inadequate emergency access?

As discussed above under Criterion (d), the proposed project would not make modifications to sidewalks, roadways, and would not include new site access driveways. Therefore, no impact would occur with respect to emergency access and this issue will not be discussed in the EIR.

f) Would the proposed project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

As discussed previously under Existing Conditions, the project site is currently served with several pedestrian, bicycle and transit facilities. The proposed project would continue to serve as a neighborhood park and would not eliminate any transit stop, or interfere with any bicycle, transit, or pedestrian facility. Impacts would be *less than significant* and this issue will not be discussed in the EIR.

XVIII. Utilities and Service Systems

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	❒	❒	❒	■
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	❒	❒	❒	■
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	❒	❒	❒	■

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	❒	❒	❒	■
e) Result in a determination by the wastewater treatment provider 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?	❒	❒	❒	■
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	❒	❒	❒	■
g) Comply with federal, state, and local statutes and regulations related to solid waste?	❒	❒	❒	■
h) Result in a substantial increase in natural gas and electric service demands requiring new energy supply facilities and distribution infrastructure or capacity enhancing alternations to existing facilities?	❒	❒	❒	■

Existing Conditions

The EBMUD provides wholesale water, retail water, wastewater collection, and wastewater treatment services for an area of approximately 331 square miles in Contra Costa and Alameda counties. Currently, EBMUD provides an average of 220 million gallons per day (MGD) in non-drought years. The main source of these supplies is the Mokelumne River with a diversion point at Pardee Reservoir in Calaveras and Amador counties.[99] Overall, the EBMUD has the water rights and capacity for 325 MGD from the Mokelumne River.[100]

The Lafayette storm drain system is a network of open channels and pipes which drain into the six major creeks.[101] For the project site, the storm drain system drains into Lafayette Creek, and ultimately into Las Trampas Creek. The City is responsible for operation and maintenance of publicly-owned portions of the system. Maintenance of portions on private property is the responsibility of the landowner.

The Central Contra Costa Solid Waste Authority (CCCSWA), a Joint Powers Authority, oversees solid waste collection, disposal, and recycling services in Walnut Creek, Danville, Moraga, Lafayette, and Orinda, and the unincorporated areas of Contra Costa County.[102] The CCCSWA has agreements with Allied Waste for the collection, transfer, and disposal of residential and commercial solid waste, and with Valley Waste

[99] East Bay Municipal Utility District (EBMUD), 2012. Water Supply Management Program 2040 Plan, page 3-1.
[100] East Bay Municipal Utility District (EBMUD), 2012. Water Supply Management Program 2040 Plan, page 3-5.
[101] City of Lafayette, 2002. Lafayette General Plan, Chapter VI, Safety.
[102] Central Contra Costa Solid Waste Authority (CCCSWA), http://www.recyclesmart.org/node/68, accessed October 3, 2017.

Management for the collection of residential recycling, green waste, and food scraps.[103] Allied Industries transports the collected solid waste to the Contra Costa Solid Waste Transfer and Recovery Station (CCSWTRS) in Martinez. From there, non-recyclable material is taken to the Keller Canyon Landfill in Contra Costa County for ultimate disposal. Keller Canyon Landfill is permitted to receive up to 3,500 tons of waste per day. CalRecycle lists the expected closure date of the landfill to be December 31, 2030. The landfill has a total capacity of 75.018 million cubic yards and a remaining capacity of over 63.408 million cubic yards.[104]

Discussion

a) Would the proposed project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The project's General Plan land use designation is Parkland. The proposed project does not require water supply beyond what is currently used on the project site and would not produce or create wastewater given that it will not introduce any restroom facilities and would not need to connect to existing wastewater infrastructure; therefore, the proposed project would not exceed wastewater treatment requirements or require new or expanded wastewater treatment facilities. Accordingly, *no impact* would occur and this issue will not be discussed in the EIR.

b) Would the proposed project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

As discussed above under Criterion (a), the proposed project does not require water supply beyond what is currently used on the project site and would not produce or create wastewater given that it will not introduce restrooms. Accordingly, *no impact* would occur and this issue will not be discussed in the EIR.

c) Would the proposed project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The storm drain system in Lafayette is operated by the City of Lafayette. The system is designed to control flooding and does not treat the storm water runoff. The storm sewer system drains into Lafayette Creek, and ultimately into Las Trampas Creek. The City targets creeks and storm drain facilities for regular inspection. Priority locations are inspected before and after each major storm event.[105] No new construction or physical changes to the property are proposed as part of the proposed project that would

[103] Central Contra Costa Solid Waste Authority (CCCSWA), http://www.recyclesmart.org/filebrowser/download/768, accessed on October 3, 2017.

[104] California Integrated Waste Management Board (CIWMB), http://www.calrecycle.ca.gov/SWFacilities/Directory/07-AA-0032/Detail/, accessed January 4, 2017.

[105] Contra Costa Clean Water Program (CCCWP), 2015. Annual Report, http://www.cccleanwater.org/surveys-studies.html, accessed August 15, 2016.

significantly impact storm water drainage, and thus, no new or expanded storm water facilities would be needed. Accordingly, *no impact* would occur and this issue will not be discussed in the EIR.

d) Would the proposed project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

As discussed above under Criterion (a), the proposed project does not require water supply beyond what is currently used. Accordingly, *no impact* would occur and this issue will not be discussed in the EIR.

e) Would the proposed 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?

As discussed above under Criterion (a), the proposed project does not require water supply beyond what is currently used on the project site and would not produce or create wastewater given that it will not introduce restrooms. Accordingly, *no impact* would occur and this issue will not be discussed in the EIR.

f) Would the proposed project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

The Central Contra Costa Solid Waste Authority (CCCSWA), a Joint Powers Authority, oversees solid waste collection, disposal, and recycling services in Walnut Creek, Danville, Moraga, Lafayette, and Orinda, and the unincorporated areas of Contra Costa County. The CCCSWA has agreements with Allied Waste for the collection, transfer, and disposal of residential and commercial solid waste, and with Valley Waste Management for the collection of residential recycling, green waste, and food scraps. Allied Industries transports the collected solid waste to the Contra Costa Solid Waste Transfer and Recovery Station (CCSWTRS) in Martinez. From there, non-recyclable material is taken to the Keller Canyon Landfill in Contra Costa County for ultimate disposal. Keller Canyon Landfill is permitted to receive up to 3,500 tons of waste per day and has a remaining capacity of over 63.408 million cubic yards.[106] The proposed project would result in minimal, if any, solid waste that would require service by a landfill. Accordingly, *no impact* would occur and this issue will not be discussed in the EIR.

g) Would the proposed project comply with federal, state, and local statutes and regulations related to solid waste?

The proposed project would have a significant environmental impact if it would lead to a breach of public standards relating to solid waste or litter control. The City of Lafayette has adopted a Source Reduction and Recycling Element (SRRE) and a Non-Disposal Facility Element (NDFE) in compliance with AB 939, the California Integrated Waste Management Act of 1989. Implementation of strategies and programs from these plans allowed the City to meet the State mandated waste diversion goal of 50 percent, and

[106] Department of Resources Recycling and Recovery (CalRecycle), Keller Canyon Landfill (07-AA-0032), http://www.calrecycle.ca.gov/SWFacilities/Directory/07-AA-0032/Detail/, accessed August 15, 2016.

Lafayette reached its goal, achieving a diversion rate of 61 percent in 2015.[107] These programs are sufficient to ensure that future development in Lafayette would not compromise the ability to meet or perform better than the State-mandated target. Additionally, construction debris associated with project implementation would be subject to LMC Chapter 5-6, Construction and Demolition Debris Recycling, which requires that a minimum of 50 percent of construction and demolition debris be diverted from landfill.[108] Compliance with applicable statutes and regulations would ensure that the impact would be *less than significant*. This issue will not be discussed in the EIR.

h) Would the proposed project result in a substantial increase in natural gas and electric service demands requiring new energy supply facilities and distribution infrastructure or capacity enhancing alternations to existing facilities?

The project site does not contain any lighting sources and the project does not propose to introduce any sources of light or connect to electrical service meters. Accordingly, *no impact* would occur and this issue will not be discussed in the EIR.

XIX. Mandatory Findings of Significance

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	❒	❒	■	❒
b) Does the project have impacts that are individually limited, but 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?	❒	❒	■	❒

[107] Central Contra Costa Solid Waste Authority (CCCSWA), 2016. Agenda Report, AB 939 Annual Report for 2015 Calendar Year, September.

[108] City of Lafayette Municipal Code, Title 5, Health and Sanitation, Chapter 5-6, Construction and Demolition Debris Recycling.

Discussion

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

As described above, the project site is located within a residential neighborhood and bordered by residential housing. There are no sensitive natural communities, no areas of sensitive habitat, and no areas of critical habitat occurring at the project site. Additionally, there are no buildings, recorded archaeological sites, and no known paleontological resources located on the project site. Therefore, implementation of the proposed project would result in a *less-than-significant* impact to the environment and wildlife on the project site. This will not be discussed in the EIR.

b) Does the proposed 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)?

As described in the environmental checklist, the impacts of the proposed project may be *potentially significant* with respect to noise. Therefore, the proposed project could contribute to significant cumulative impacts when considered along with other reasonably foreseeable projects in the area. This will be discussed in the EIR.

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

As discussed previously, the proposed project may have a *potentially significant* impact on the environment with respect to noise. This will be discussed in the EIR.

5. Organizations and Persons Consulted

This Initial Study was prepared by the following consultants and individuals:

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