FIRSTCARBONSOLUTIONS™

DRAFT
William J. Payne Sports Park Renovation Project
Initial Study/Mitigated Negative Declaration
City of Livermore, Alameda County, California

Prepared for:
Livermore Area Recreation and Park District
4444 East Ave
Livermore, CA, 94550
925.373.5700

Contact: Patricia Lord, Assistant General Manager

Prepared by:
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597
925.357.2562

Contact: Mary Bean, Project Director
Grant Gruber, Project Manager

Report Date: October 15, 2018

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

List of Tables

List of Exhibits

ACRONYMS AND ABBREVIATIONS

$\mu g/m^3$	micrograms per cubic meter
°F	degrees Fahrenheit
°C	degrees Celsius (Centigrade)
ACM	asbestos containing material
AQP	air quality plan
ARB	California Air Resources Board
BMX	bicycle motocross
CAP	Clean Air Plan
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
dBA	A-weighted decibel
DPM	diesel particulate matter
EPA	Environmental Protection Agency
FCS	FirstCarbon Solutions
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FTA	Federal Transit Administration
in/sec	inch per second
IS/MND	Initial Study/Mitigated Negative Declaration
LARPD	Livermore Area Recreation and Park District
MM	Mitigation Measure
mph	miles per hour
NAHC	Native American Heritage Commission
NWIC	Northwest Information Center
PDOS	Planned Development Open Space
PM	particulate matter
PPV	peak particle velocity
ROG	reactive organic gas
TAC	toxic air contaminant
TCR	Tribal Cultural Resources
UCMP	University of California Museum of Paleontology
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
VOC	volatile organic compounds

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 1: INTRODUCTION

1.1 - Purpose

The purpose of this Initial Study/Mitigated Negative Declaration (IS/MND) is to identify any potential environmental impacts from implementation of the William J. Payne Sports Park Renovation Project in the City of Livermore, California. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, Livermore Area Recreation and Park District (District) is the Lead Agency in the preparation of this IS/MND and any additional environmental documentation required for the project. The District has discretionary authority over the proposed project. The intended use of this document is to determine the level of environmental analysis required to adequately prepare the project IS/MND and to provide the basis for input from public agencies, organizations, and interested members of the public.

The remainder of this section provides a brief description of the project location and the characteristics of the project. Section 2 includes an environmental checklist giving an overview of the potential impacts that may result from project implementation. Section 3 elaborates on the information contained in the environmental checklist, along with justification for the responses provided in the environmental checklist.

1.2 - Project Location

The approximately 14.07-acre project site is located at 5800 Patterson Pass Road in the City of Livermore, Alameda County, California (Exhibit 1). The project site consists of one parcel (Assessor's Parcel Number [APN] 99A-1400-29]) and is located at the intersection of South Vasco Road and Patterson Pass Road. The William J. Payne Sports Park is a semi-triangular park bounded by a flood control channel and the Union Pacific Railroad right-of-way[1] (west and north), Vasco Road (east), and Patterson Pass Road (south) (Exhibit 2). The project site is located on the Altamont, California, United States Geological Survey (USGS) 7.5-minute topographic quadrangle map, Township 3 South, Range 2 East, Unsectioned (Latitude 37°41'44" North; Longitude 121°43'12" West). The project site is at an elevation of approximately 560 feet above mean sea level.

1.3 - Environmental Setting

The William J. Payne Sports Park is a 14.07-acre special use park developed in 2002 that provides two natural grass baseball/softball fields with packed dirt infields, a multi-purpose natural grass field primarily used for soccer, and a bicycle motocross (BMX) course. The Park is owned by the City of Livermore and maintained by Livermore Area Recreation and Park District (LARPD).

Vehicular access to the Park comes from an unsignalized driveway on Patterson Pass Road aligned with Arlene Way. The driveway provides access to a parking area with 129 spaces located between the athletic fields and the BMX course. Mature ornamental trees and fencing surround the

[1] This rail line is used by Altamont Corridor Express commuter rail service. The Vasco Road Station is located northeast of the project site.

perimeter of the athletic fields. A stormwater basin is located in the western portion of the site. Site photographs are provided in Exhibit 3.

1.3.1 - Land Use Designations

The project site is designated "OSP—Parks, Trailways, Recreations Areas" by the City of Livermore General Plan Map and zoned "PDOS—Planned Development Open Space" by the Livermore Development Code.

1.4 - Project Description

LARPD is pursuing a Master Plan for the William J. Payne Sports Park that would guide the redevelopment of the facility. The baseball/softball fields, multi-purpose field, and BMX course would be removed. A new lighted synthetic turf multi-purpose field enclosed with a fence, two futsal courts[2], a multi-purpose natural grass field, a play area with shade canopies, a group fitness area with shade canopies, and a shaded picnic area would be developed. The parking lot would be reconfigured to provide an additional 156 parking spaces with a total of 285 spaces. Vehicular access would be taken from the same driveway location on Patterson Pass Road. A walking loop would be provided around the perimeter of the synthetic turf fields and the multi-purpose natural grass field. Restrooms would be provided near the futsal courts. A pedestrian gateway would be provided at the intersection of South Vasco Road/Patterson Pass Road. The stormwater basin would remain in the western portion of the site. (Exhibit 4)

1.5 - Required Discretionary Approvals

The following discretionary approvals are required for the proposed project:

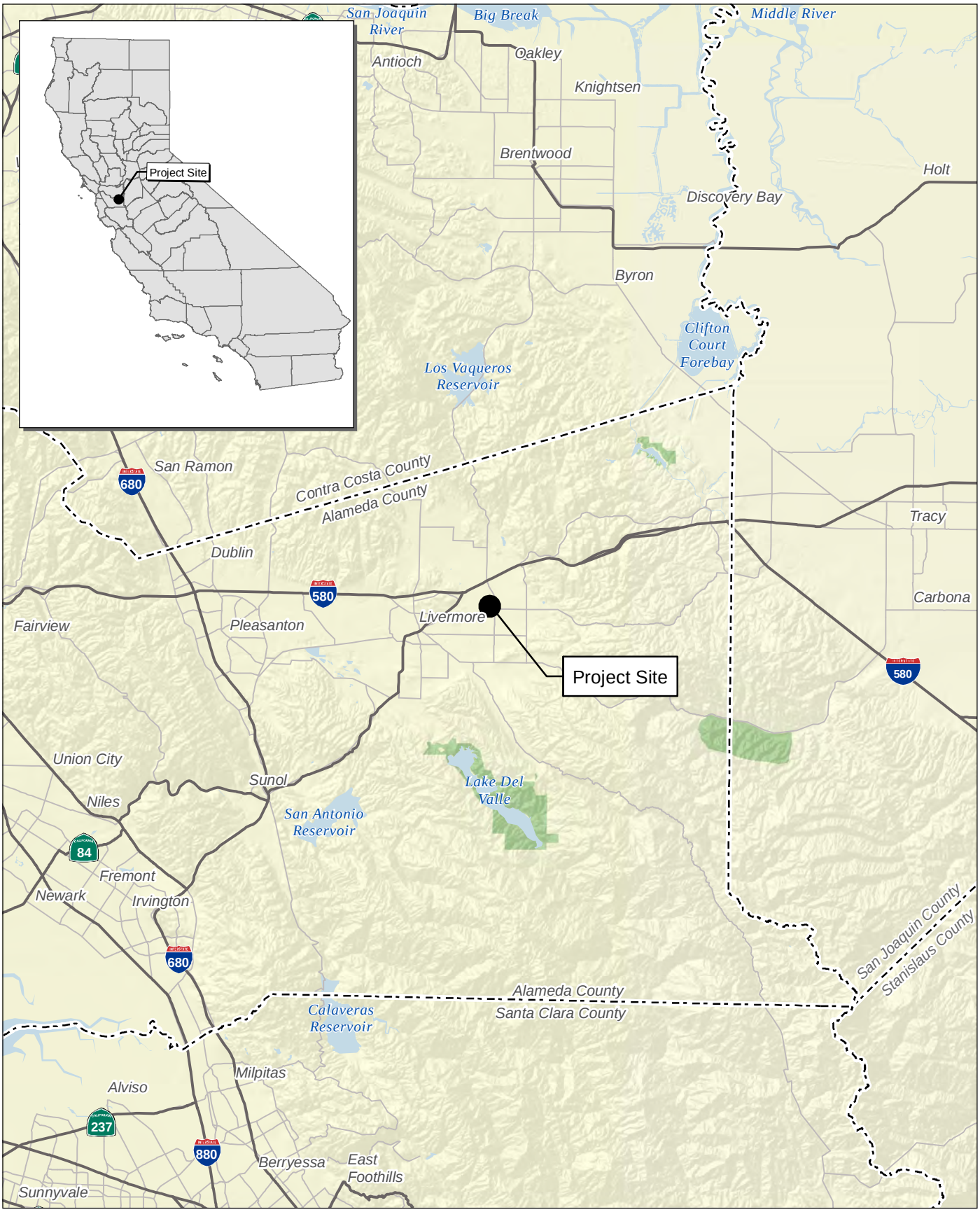
- Master Plan Adoption

1.6 - Intended Uses of this Document

This IS/MND has been prepared to determine the appropriate scope and level of detail required in completing the environmental analysis for the proposed project. This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the proposed project. The Draft IS/MND will be circulated for a minimum of 30 days, during which period comments concerning the analysis contained in the IS/MND should be sent to:

Patricia Lord, Assistant General Manager
Livermore Area Recreation and Park District
4444 East Ave
Livermore, CA, 94550
Phone: 925.373.5700

[2] Futsal is a variation of soccer played on a hard court surface



Source: Census 2000 Data, The CaSIL

FIRSTCARBON SOLUTIONS™

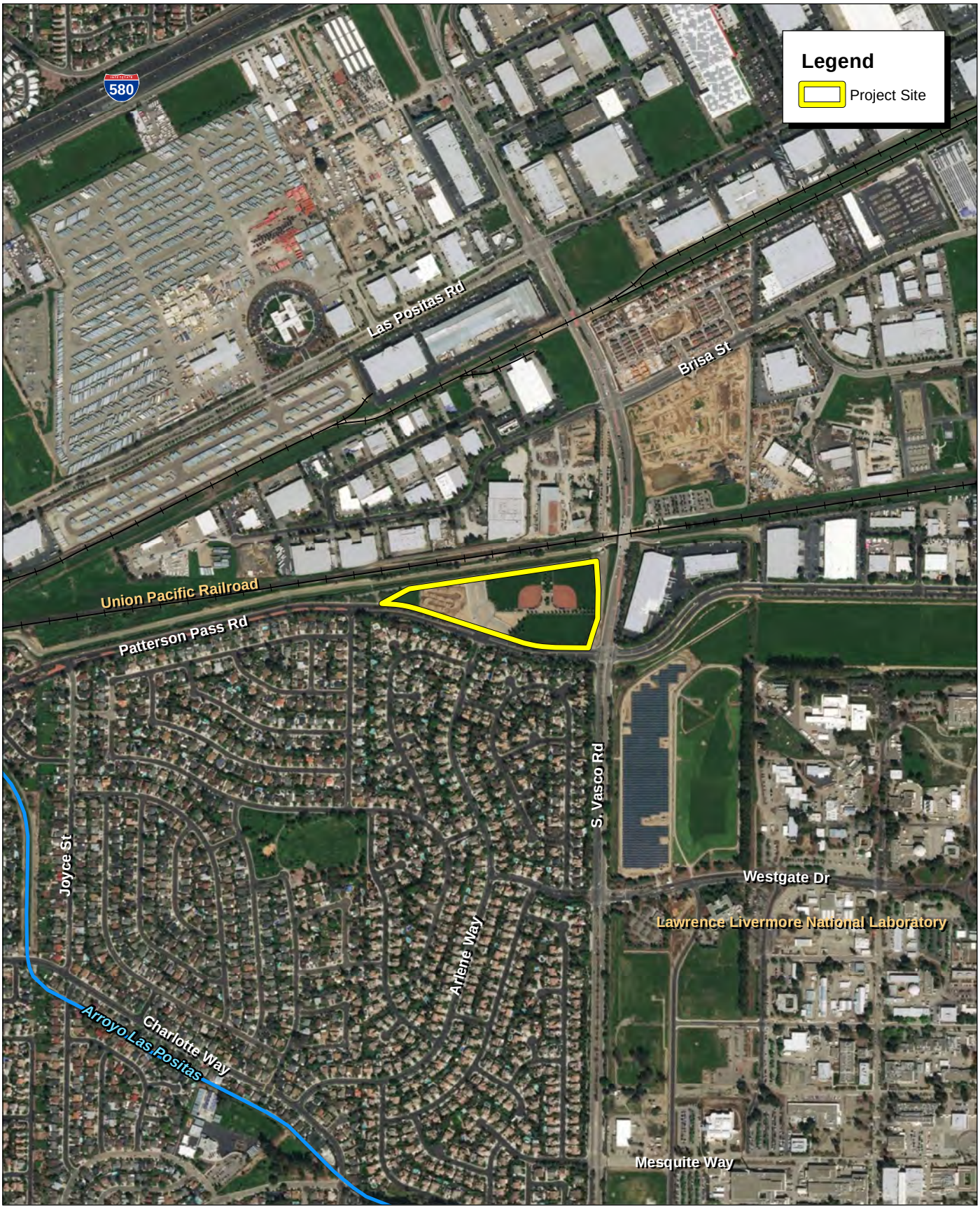
5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

36110030 • 09/2018 | 1_regional.mxd

LIVERMORE AREA RECREATION AND PARKS DISTRICT
WILLIAM PAYNE SPORTS PARK RENOVATION PROJECT
INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

THIS PAGE INTENTIONALLY LEFT BLANK



Source: ESRI Aerial Imagery.

FIRSTCARBON SOLUTIONS™

1,000 500 0 1,000 Feet

Exhibit 2
Local Vicinity Map
Aerial Base

THIS PAGE INTENTIONALLY LEFT BLANK

View of existing entrance and parking lot.

View of existing turf multi-use sports field.

THIS PAGE INTENTIONALLY LEFT BLANK

Source: rrm design group, August 15, 2018.

FIRSTCARBON SOLUTIONS™

Exhibit 4
Site Plan

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 2: ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

Environmental Factors Potentially Affected					
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.					
☐	Aesthetics	☐	Agriculture and Forestry Resources	☐	Air Quality
☐	Biological Resources	☐	Cultural/Tribal Cultural Resources	☐	Geology/Soils
☐	Greenhouse Gas Emissions	☐	Hazards/Hazardous Materials	☐	Hydrology/Water Quality
☐	Land Use/Planning	☐	Mineral Resources	☐	Noise
☐	Population/Housing	☐	Public Services	☐	Recreation
☐	Transportation/Traffic	☐	Utilities/Services Systems	☐	Mandatory Findings of Significance

Environmental Determination

On the basis of this initial evaluation:

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

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

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

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measure 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.

Date: October 15, 2018 Signed: Patricia Lord, Assistant General Manager

Patricia Lord, Assistant General Manager

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
1. Aesthetics *Would the project:*				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

Environmental Evaluation

Would the project:

a) Have a substantial adverse effect on a scenic vista?

No impact. The City of Livermore General Plan identifies Arroyo Mocho, Brushy Peak, and Mt. Diablo as scenic vistas. Mt. Diablo can be seen from various vantage points within the Park; however, the other two features are not visible. The proposed Park improvements consist of low profile features such as new multi-purpose fields, futsal courts, play area, and picnic tables that would not have the ability to affect views of Mt. Diablo. This condition precludes the potential for a substantial adverse effect on a scenic vista. No impact would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?

No impact. Interstate 580 (I-580) within Livermore is classified as an "Eligible" State Scenic Highway by Caltrans. The project site is located approximately 0.86 mile south of I-580 and is not visible from I-580 because of the intervening topography, vegetation, or structures. This condition precludes the potential for substantial damage to scenic resources within view of a State Scenic Highway. No impact would occur.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less than significant impact. The project site is located within a developed portion of the City of Livermore and is surrounded by light industrial and residential uses, as well as Lawrence Livermore National Laboratory. Compared with the existing land use on the project site, the project would

share similar visual characteristics, since both the existing and proposed project would be recreational in nature. The new Park improvements and landscaping contemplated by the project would be consistent and compatible with the existing visual character of the site and surrounding areas.

The proposed project is a continuation and renovation of the existing land use activities, and, therefore, implementation of the project would not substantially change views from the surrounding natural areas, nor would it change views of these natural lands from other vantage points. Therefore, impacts associated with visual character and quality would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than significant impact with mitigation incorporated. The William J. Payne Sports Park currently does not have nighttime athletic field lighting. The proposed project would introduce nighttime athletic field lighting for the synthetic turf multi-purpose field that has the potential to result in adverse nighttime lighting spillover impacts onto surrounding land uses. Mitigation Measure AES-1 requires the Lead Agency to ensure that athletic field lighting fixtures are directed onto the field of play, employ shielding devices, and use automatic shut-off timers. With the implementation of Mitigation Measure AES-1, the new athletic field lighting would not result in substantial light and glare. Impacts would be less than significant.

Mitigation Measures

MM AES-1 Prior to approval of the final improvement plans, the Lead Agency shall verify that athletic field lighting fixtures are directed onto the field of play and employ any necessary shielding devices to ensure that illumination does not spillover onto nearby land uses. The Lead Agency shall also install automatic shut-off timers on all athletic field lighting fixtures to shut off lights at pre-determined times or when fields are not in use.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2. Agriculture and Forestry Resources *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:*				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Environmental Evaluation

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project, the Forest Legacy Assessment project, and

the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (ARB).

Would the project:

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

No impact. The California Department of Conservation Farmland Mapping and Monitoring Program mapping for Alameda County designates the project site as "Urban and Built-Up Land." Much of the land surrounding the site is highly developed. Therefore, there would be no conversion of any farmland to non-agricultural use because of the project. No impacts would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No impact. The Park is zoned "PDOS—Planned Development Open Space" by the Livermore Development Code, a non-agricultural zoning designation. The Park does not support agricultural uses and, therefore, is not eligible for a Williamson Act Contract. No impact would occur.

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))?

No impact. The Park is zoned "PDOS—Planned Development Open Space" by the Livermore Development Code, a non-forest zoning designation. No impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No impact. The William J. Payne Sports Park does not support forest land. As such, project implementation would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

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 conversion of forest land to non-forest use?

No impact. Based on the above, the project site does not contain any land designated Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), forest land, or timberland. Therefore, no impacts associated with the conversion of Farmland or forest land would occur.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
3. Air Quality *Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.* *Would the project:*				
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 region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

The analysis is based on air quality analysis prepared by FirstCarbon Solutions (FCS). Supporting information is provided in Appendix A.

Environmental Evaluation

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact with mitigation incorporated. The project site is located at 5800 Patterson Pass Road in the City of Livermore, which is in the San Francisco Bay Area Air Basin (Air Basin). The Environmental Protection Agency (EPA) is responsible for identifying nonattainment and attainment areas for each criteria pollutant within the Air Basin. The Air Basin is designated nonattainment for State standards for 1-hour and 8-hour ozone, 24-hour small particulate matter (PM_{10}), annual PM_{10}, and annual respirable particulate matter ($PM_{2.5}$).

To address regional air quality standards, the BAAQMD has adopted several air quality policies and plans, and in April 2017, BAAQMD adopted their 2017 Clean Air Plan (2017 CAP), which serves as the regional air quality plan (AQP) for the Air Basin for attaining federal ambient air quality standards. The primary goals of the 2017 CAP are to protect public health and protect the climate. The 2017 CAP acknowledges that the BAAQMD's two stated goals of protection are closely related. As such, the 2017 CAP identifies a wide range of control measures intended to decrease both criteria pollutants[3] and greenhouse gases (GHGs).[4] In September 2010, BAAQMD adopted their final Bay Area 2010 Clean Air Plan (2010 CAP), which became the most recent ozone plan for the Air Basin. The 2010 CAP identifies how the Air Basin would achieve compliance with the State 1-hour air quality standard for ozone, and how the region will reduce ozone from transporting to other basins downwind wind of the Air Basin. The 2017 CAP updates the BAAQMD's 2010 CAP, pursuant to air quality planning requirements defined in the California Health and Safety Code.

The 2017 CAP also accounts for projections of population growth provided by Association of Bay Area Governments and vehicle miles traveled provided by the Metropolitan Transportation Commission, and identifies strategies to bring regional emissions into compliance with federal and State air quality standards. A project would be judged to conflict with or obstruct implementation of the 2017 CAP if it would result in substantial new regional emissions not foreseen in the air quality planning process.

The proposed project would be consistent with the existing recreational land use, and would not result in a substantial intensification from the underlying mobile and population assumptions contained in the 2017 CAP. Additionally, the proposed project would not result in a substantial unplanned increase in population, employment, or regional growth in vehicle miles traveled, or emissions, so it would not conflict with or obstruct implementation of the 2017 CAP. As addressed in Impacts 3b) through 3e) below, the proposed project would not violate air quality standards, result in a cumulative contribution of a non-attainment pollutant, expose sensitive receptors to substantial air pollution concentrations, or create objectionable odors affecting a substantial number of people, with incorporation of Mitigation Measure AIR-1. Thus, the proposed project would not conflict with the 2017 CAP. Therefore, with mitigation, impacts associated with conflicting with or obstructing implementation of the 2017 CAP would be less than significant.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than significant impact with mitigation incorporated. This impact relates to localized and regional criteria pollutant impacts from project construction and operation. Potential impacts would result in exceedances of State or federal standards for oxides of nitrogen (NO_X), particulate matter (PM_{10} and $PM_{2.5}$), or carbon monoxide (CO). NO_X emissions are of concern because of potential

[3] EPA has established national ambient air quality standards (NAAQS) for six of the most common air pollutants—carbon monoxide, lead, ground-level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide—known as "criteria" air pollutants (or simply "criteria pollutants").

[4] A greenhouse gas is any gaseous compound in the atmosphere that is capable of absorbing infrared radiation, thereby trapping and holding heat in the atmosphere. By increasing the heat in the atmosphere, greenhouse gases are responsible for the greenhouse effect, which ultimately leads to global warming.

health impacts from exposure to NO_X emissions during both construction and operation and as a precursor in the formation of airborne ozone. PM_{10} and $PM_{2.5}$ are of concern during construction because of the potential to emit exhaust emissions from the operation of off-road construction equipment and fugitive dust during earth-disturbing activities (construction fugitive dust). CO emissions are of concern during project operation because operational CO hotspots are related to increases in on-road vehicle congestion.

Reactive organic gas (ROG) emissions are also important because of their participation in the formation of airborne ozone. Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and that can cause substantial damage to vegetation and other materials. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, elderly, and young children. Construction and operational emissions are discussed separately below.

Construction Emissions

During construction, fugitive dust (PM_{10} and $PM_{2.5}$) would be generated from site grading and other earth-moving activities. The majority of this fugitive dust would remain localized and would be deposited near the project site. However, the potential for impacts from fugitive dust exists unless control measures are implemented to reduce the emissions from this source. Exhaust emissions would also be generated from the operation of the off-road construction equipment.

Construction Fugitive Dust

BAAQMD does not recommend a numerical threshold for fugitive dust particulate matter emissions. Instead, BAAQMD bases the determination of significance for fugitive dust on a consideration of the control measures to be implemented. If all appropriate emissions control measures are implemented for a project as recommended by BAAQMD, then fugitive dust emissions during construction are not considered significant.

As required by MM AIR-1, the project would implement best management practices recommended by BAAQMD for fugitive dust emissions during construction. Therefore, with mitigation, short-term construction impacts associated with violating an air quality standard or contributing substantially to an existing or projected air quality violation would be less than significant.

During construction, fugitive dust (PM_{10} and $PM_{2.5}$) would be generated from site grading and other earth-moving activities. The majority of this fugitive dust will remain localized and will be deposited near the project site. However, the potential for impacts from fugitive dust exists unless control measures are implemented to reduce the emissions from this source. Exhaust Emissions would also be generated from the operation of the off-road construction equipment.

BAAQMD does not recommend a numerical threshold for fugitive dust particulate matter emissions. Instead, BAAQMD bases the determination of significance for fugitive dust on a consideration of the control measures to be implemented. If all appropriate emissions control measures recommended by BAAQMD are implemented for a project, then fugitive dust emissions during construction are not considered significant.

As required by Mitigation Measure AIR-1, the proposed project would implement the best management practices recommended by BAAQMD. Therefore, with mitigation, short-term construction impacts associated with violating an air quality standard or contributing substantially to an existing or projected air quality violation would be less than significant.

Construction: ROG, NO_X, PM_{10}, $PM_{2.5}$

The 2017 Air Quality Guidelines provide screening criteria developed for criteria pollutants and precursors. According to the 2017 Air Quality Guidelines, if the project meets the screening criteria then its air quality impacts relative to the criteria pollutants may be considered less than significant. In developing the 2017 Air Quality Guidelines, BAAQMD also considered the emission levels for which a project's individual emissions would be cumulatively considerable. For construction specifically, the project would result in a less than significant impact to air quality if the following screening criteria are met:

1. The project is below the applicable screening level size (see Table 1).
2. All basic construction mitigation measures would be included in the project design and implemented during construction.
3. Construction-related activities would not include any of the following:
   a) Demolition activities inconsistent with District Regulation 11, Rule 2: Asbestos Demolition, Renovation, and Manufacturing;
   b) Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously);
   c) Simultaneous construction of more than one land use type (e.g., project would develop residential and commercial uses on the same site) (not applicable to high density infill development);
   d) Extensive site preparation (i.e., greater than default assumptions for grading, cut/fill, or earth movement); or
   e) Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

Table 1: Criteria Air Pollutant and Precursors Screening Level for Construction Emissions

Land Use	Screening Size	Project Size	Project Percent of Screening Size
City Park	67 acres	14.07 acres	20.9 percent
Source: BAAQMD 2017.			

The project consists of the redevelopment of the William J. Payne Sports Park, an existing 14.07-acre park. Although the project size would not exceed the BAAQMD screening size thresholds, the project may not meet all of the screening criteria outlined by the BAAQMD. Unless the project meets all of the screening criteria, construction activities may have the potential to generate

significant quantities of air pollutants. As listed below, the project would meet some of the other screening criteria:

- As required by Mitigation Measure AIR-1, the project would include all basic construction mitigation measures;
- Construction-related activities would not violate the screening size (refer to Table 1);
- Construction would involve demolition, but would be consistent with District Regulation 11, Rule 2: Asbestos Demolition, Renovation, and Manufacturing, regarding asbestos;
- The project may involve the simultaneous occurrence of more than two construction phases or construction of more than one land use type;
- Site preparation is not expected to be greater than default values;
- Soil would be balanced on-site and, therefore, there would be no soil imported or exported from the project site. The project would require the removal of existing hardscape and any associated structures during the demolition phase. It was estimated that 321 hauling trips would be required during the demolition phase. As such, the project would not require extensive material transport requiring a considerable amount of haul truck activity in excess of haul truck activity exceeding the screening criteria of 10,000 cubic yards.

Because the detailed construction is unknown at this time, there is no certainty that the project would not involve the simultaneous occurrence of more than two construction phases; therefore, it was assumed that the project would not meet this criterion. Thus, the project cannot be deemed less than significant using the screening method, and project construction emissions must be compared with the BAAQMD significance thresholds.

Table 2 below summarizes the construction-generated emissions in tons per day, while the construction-related emissions in average daily pounds is shown in Table 3. As provided in Table 3, the BAAQMD's regional emission thresholds for construction exhaust would not be exceeded for any regional pollutant. Therefore, the project would have a less than significant regional emissions impact from project construction.

For the purposes of providing a conservative assessment, construction of the project was assumed to begin in January 2019 and last for 12 months. Construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements if the construction schedule moves to later years. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required by CEQA guidelines. Average daily construction emissions are compared with the significance thresholds in Table 3.

Table 2: Annual Construction Emissions (Unmitigated)

Construction Activity	Tons/Year			
	ROG	NO_X	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
2019				
Demolition	0.04	0.41	0.02	0.02
Site Preparation	0.02	0.23	0.01	0.01
Grading	0.07	0.82	0.04	0.03
Building Construction	0.11	1.04	0.04	0.04
Paving	0.02	0.15	0.01	0.01
Architectural Coating	0.04	0.02	0.00	0.00
Landscaping	0.07	0.65	0.04	0.04
Total Construction Emissions	**0.38**	**3.32**	**0.16**	**0.14**

Notes:
ROG = reactive organic gases NO_X = oxides of nitrogen
PM_{10} = particulate matter 10 microns in diameter
$PM_{2.5}$ = particulate matter 2.5 microns in diameter
Unrounded numbers from the California Emissions Estimator Model (CalEEMod) output were used for all calculations; therefore, sums may appear not to total correctly due to rounding.

Table 3: Construction Emissions (Unmitigated Average Daily Rate)

Parameter	Air Pollutants			
	ROG	NO_X	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Total Emissions (tons/year)	0.38	3.32	0.16	0.14
Total Emissions (lbs/year)	753	6,647	311	290
Average Daily Emissions (lbs/day)[1]	2.89	25.47	1.19	1.11
Significance Threshold (lbs/day)	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	**No**	**No**	**No**	**No**

Notes:
[1] Calculated by dividing the total lbs by the 261 total working days of construction for the duration of construction (January 1, 2019 through December 31, 2019).
Calculations use unrounded totals.
lbs = pounds ROG = reactive organic gases NO_X = oxides of nitrogen
PM_{10} = particulate matter 10 microns in diameter
$PM_{2.5}$ = particulate matter 2.5 microns in diameter
Source: CalEEMod Output (see Appendix A).

As shown in Table 3, the construction emissions from all construction activities are well below the recommended thresholds of significance; therefore, the construction of the project would have less

than significant impact in regards to emissions ROG, NO_X, exhaust PM_{10}, and exhaust $PM_{2.5}$. As previously discussed, the project would implement Mitigation Measure AIR-1 with best management practices recommended by the BAAQMD to reduce potential impacts related to fugitive dust emissions from use of the construction equipment. Therefore, project construction would have a less than significant impact after implementation of mitigation.

Long-Term Operational Impacts

Generally, long-term operational emissions could result from project-related traffic and through the routine use of maintenance equipment. BAAQMD's 2017 Guidelines provide guidance and screening criteria for determining if a project could potentially result in significant air quality impacts. As shown in Table 4, the project would not result in operational-related air pollutants or precursors that would exceed BAAQMD's thresholds of significance. For example, the operational criteria pollutant screening size for a city park is 2,613 acres. The proposed project is well below BAAQMD's screening threshold, indicating that ongoing project operations would not be considered to have the potential to generate a significant quantity of air pollutants. Therefore, long-term operation impacts associated with criteria pollutant emissions would be less than significant.

Table 4: Criteria Air Pollutants and Precursors Screening Level Sizes for Operational Emissions

Land Use Type	Operational Criteria Pollutant Screening Size	Project Size	Project Percent of Screening Size
City Park	2,613 acres	14.07 acres	0.54 percent
Source: BAAQMD 2017 Guidelines			

Carbon Monoxide Hotspot

The CO emissions from traffic generated by the project are a concern at the local level. Congested intersections can result in high, localized concentrations of CO.

The BAAQMD recommends a screening analysis to determine if a project has the potential to contribute to a CO hotspot. The screening criteria identify when site-specific CO dispersion modeling is necessary. The project would result in a less than significant impact to air quality for local CO if any of the following screening criteria are met:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans; or
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; or

- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

As indicated in Section 16, Transportation/Traffic, the project would not conflict with the applicable congestion management plan. While the proposed project would generate an increase in daily trips, most of the new trips would occur during off-peak times and not cross the 100 PM peak hour threshold. Therefore, based on the above criteria, the project would not exceed the CO screening criteria and would have a less than significant impact related to CO.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

Less than significant impact with mitigation incorporated. As shown in Tables 4 and 5, neither construction nor operations of the project would result in criteria air pollutants or precursors that would exceed BAAQMD's project-level thresholds of significance. The thresholds of significance represent the allowable amount of emissions each project can generate without generating a cumulatively considerable contribution to regional air quality impacts. As discussed above, the region is non-attainment for the federal and State ozone standards, the State PM_{10} standards, and the federal and State $PM_{2.5}$ standards. Therefore, a project that would not exceed the BAAQMD thresholds of significance on a project level also would not be considered to result in a cumulatively considerable contribution to these regional air quality impacts.

Construction Emissions

Emissions from construction-related activities are generally short-term in duration but may still cause adverse air quality impacts. The project would generate emissions from construction equipment exhaust, worker travel, and fugitive dust. These construction emissions include criteria air pollutants from the operation of heavy construction equipment. As provided in the discussion under Impact 3b, the project's construction emissions would not exceed any significance threshold adopted for this project after application of mitigation. Therefore, the project would have a less than significant cumulative impact during construction after incorporation of Mitigation Measure AIR-1.

Operational Emissions

As provided in the discussion under Impact 3b, the size of the project (approximately 14.07 acres) is well below the BAAQMD's screening threshold of 2,613 acres. Because the project's size would not exceed the applicable screening threshold, the project's operations would not be considered to have the potential to generate a significant quantity of air pollutants. Therefore, project operations would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact with mitigation incorporated. This impact addresses whether the project would expose sensitive receptors to asbestos, construction-generated fugitive dust (PM_{10} and $PM_{2.5}$), construction-generated diesel particulate matter (DPM), operational-related toxic air contaminants, or operational CO hotspots.

BAAQMD considers a sensitive receptor to be any facility or land use that includes members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. If a project is likely to be a place where people live, play, or convalesce, it should be considered a receptor. It should also be considered a receptor if sensitive individuals are likely to spend a significant amount of time there. Examples of receptors include residences, schools and school yards, parks and playgrounds, daycare centers, nursing homes, and medical facilities. Playgrounds could be play areas associated with parks or community centers. As a renovation of an existing park, the proposed project itself is a sensitive receptor. The nearest off-site sensitive receptors are existing residences located south of the project, across Patterson Pass Road. The closest residences are approximately 180 feet south of the southern border of the project site.

Air quality problems arise when sources of air pollutants and sensitive receptors are located near one another. Localized impacts to sensitive receptors generally occur in one of two ways:

- A (new) source of air pollutants is located close to existing sensitive receptors.
- A (new) sensitive receptor is located near an existing source of air pollutants.

To address both of these types of impacts, BAAQMD has established the following health risk and hazards significance thresholds as part of its 2017 Guidelines Table 5. These thresholds were adopted for the purpose of this analysis.

Table 5: BAAQMD Health Risk Screening Analysis

Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index	$PM_{2.5}$ (mg/m^3)
Individual Impact	10	1	1	0.3
Community Cumulative Impact	100	10	10	0.8
Source: BAAQMD 2017 Guidelines				

The following analysis evaluates whether the project would result in construction or operation-period impacts to sensitive receptors. In general, because the 14.07-acre project site is already developed as a park, and the project includes redesign and enhancement of the existing uses, the ongoing operation of the park would not result in the creation of new sources of pollutants.

Short-Term Construction Impacts

Asbestos

According to a map of areas where naturally occurring asbestos in California are likely to occur[5], there are no such areas in the project area. Therefore, development of the project is not anticipated to expose receptors to naturally occurring asbestos.

Additionally, the proposed project would include the demolition of existing hardscape and associated structures. Hardscape, including the existing parking lot and baseball/softball field dugout area, is not composed of materials that are known to contain significant amounts of asbestos. Demolition of existing structures would be subject to BAAQMD Regulation 11, Rule 2: Asbestos Demolition, Renovation, and Manufacturing. BAAQMD Regulation 11, Rule 2 is intended to limit asbestos emissions from demolition or renovation of a structure and the associated disturbance of asbestos containing material (ACM) generated or handled during these activities. The rule addresses the national emissions standards for asbestos along with some additional requirements. The rule requires the Lead Agency and its contractors to notify BAAQMD of any regulated renovation or demolition activity. This notification includes a description of structures and methods utilized to determine whether asbestos-containing materials are potentially present. All ACM found on-site must be removed prior to demolition or renovation activity in accordance with BAAQMD Regulation 11, Rule 2, including specific requirements for surveying, notification, removal, and disposal of asbestos-containing materials. Therefore, projects that comply with BAAQMD Regulation 11, Rule 2 would ensure that asbestos containing materials would be removed and disposed of appropriately and safely. By complying with BAAQMD Regulation 11, Rule 2, thereby minimizing the release of airborne asbestos emissions, demolition activity would not result in a significant impact to air quality. In addition, the proposed project would be required to comply with regulations in order to ensure proper abatement of any asbestos during the demolition process, which would further reduce any impacts.

Fugitive Dust

Fugitive dust emissions from grading, trenching, or land clearing activities can create nuisances and localized health impacts. As addressed in Impact 3b), appropriate dust control measures would be implemented during project construction through inclusion of MM AIR-1. MM AIR-1 would reduce potential fugitive dust-related impacts to a less-than-significant level.

DPM and $PM_{2.5}$

As discussed in the 2017 BAAQMD Guidelines, construction activity using diesel-powered equipment emits DPM, a known carcinogen. A 10-year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. When evaluating the health risk posed by DPM, a common approach is to assume the following methodological parameters: (1) 24-hour constant exposure, (2) 350 days a year, (3) for a continuous period lasting 70 years.

[5] Department of Conservation, Division of Mines and Geology. 2000. A General Location Guide for Ultramafic Rocks in California—Areas More likely to Contain Naturally Occurring Asbestos. August. Website: https://www.arb.ca.gov/toxics/asbestos/geninfo.htm. Accessed September 19, 2018.

The majority of heavy diesel equipment usage would occur during the development of the expanded and updated park facilities. Heavy diesel equipment usage would occur over a brief duration within the estimated 12-month construction timeline. Residents located adjacent to the project site and visitors within the vicinity would be exposed to construction contaminants only for the duration of construction. Maximum PM_{10} and $PM_{2.5}$ emissions, which are often used to represent DPM emissions, would occur during demolition, site preparation, and grading activities. This period is expected to last less than three months. PM emissions would decrease for the remaining construction period, because construction activities such as paving and landscaping would require less heavy-duty diesel equipment. While the maximum DPM emissions associated with site work activities would only occur for a portion of the overall construction period, this activity represents the worst-case condition for the total construction period. This would represent less than 1 percent of the total 70-year lifetime exposure period commonly used to estimate health risks. Therefore, the proposed project would result in a less than significant impact from exposure to construction-generated DPM.

Long-Term Operational Impacts

Operational CO Hotspot

As addressed in Impact 3b), the project would not create a CO hotspot and would result in a less than significant impact for to air quality for local CO.

Toxic Air Contaminants

Generation of TACs

The proposed project site is not on a land use known to generate TACs in substantial quantities; therefore, risks to adjacent receptors from the project would be less than significant. Therefore, impacts associated with exposure of sensitive receptors to substantial pollutant concentrations from operations of the project would be less than significant.

Project as a Sensitive Receptor

The project would result in a slight capacity increase of a sensitive receptor land use. As a park, the project has the potential to locate sensitive receptors (visitors) that could be subject to existing sources of TACs near the project site. However, in *California Building Industry Association v. Bay Area Air Quality Management District,* the California Supreme Court concluded that agencies generally subject to CEQA are not required to analyze the impact of existing environmental conditions on a project's future users or residents. Therefore, impacts from existing sources of TAC emissions on sensitive receptors on the project site are not subject to CEQA. Furthermore, the project consists of the renovation of the existing William J. Payne Sports Park and would continue to support the same land use already existing. As an existing park, the project site already contains sensitive receptors (visitors) on a daily basis; therefore, the project would not place sensitive receptors closer to existing sources of TACs compared to the existing visitors. Impacts would be less than significant.

e) Create objectionable odors affecting a substantial number of people?

Less than significant impact. As stated in the BAAQMD 2017 Air Quality Guidelines, odors are generally regarded as an annoyance rather than a health hazard, and the ability to detect odors varies considerably among the populations and overall is subjective.

The BAAQMD does not have a recommended odor threshold for construction activities. However, the BAAQMD recommends operational screening criteria that are based on distance between types of sources known to generate odor and the receptor. For projects within the screening distances, the BAAQMD has the following threshold for project operations:

> An odor source with five (5) or more confirmed complaints per year averaged over three years is considered to have a significant impact on receptors within the screening distance shown in Table 3-3 [of the BAAQMD's guidance].

Two circumstances have the potential to cause odor impacts:

1) A source of odors is proposed to be located near existing or planned sensitive receptors, or
2) A sensitive receptor land use is proposed near an existing or planned source of odor.

Short-term Construction Impacts

Diesel exhaust and VOCs would be emitted during construction of the project, which are objectionable to some; however, emissions would disperse rapidly from the project site and therefore would not create objectionable odors affecting a substantial number of people. As such, construction odor impacts would be less than significant.

Long-Term Operational Impacts

Generation of Odors

Land uses typically considered associated with odors include wastewater treatment facilities, waste-disposal facilities, or agricultural operations. The project includes the redevelopment of the existing 14.07-acre William J. Payne Sports Park and does not include the development of a land use known to produce any offensive odors that would result in odor complaints. Specifically, the project does not propose activities listed in Table 3-3 of the BAAQMD 2017 Air Quality Guidelines. During operation of the project, odors would primarily consist of passenger vehicles traveling to and from the site and additionally from the use of equipment during landscaping and facility maintenance. These occurrences would not produce objectionable odors affecting a substantial number of people; therefore, impacts related to the project's generation of odor during day-to-day operations would be less than significant.

Project as a Sensitive Receptor

Although the project is not a typical source of objectionable odors, the project would be a place of congregation and would have the potential to place sensitive receptors near existing or planned sources of odors. The project site is not located within the vicinity of agricultural operations (dairies, feedlots, etc.), landfills, wastewater treatment plants, refineries, and other types of industrial land uses. Furthermore, there are no land uses within the screening distances shown in Table 3-3 of the BAAQMD's guidance that have received five or more confirmed complaints per year for any 3-year period. Thus, the project would not place sensitive receptors near sources of objectionable odor affecting a substantial number of people and impacts would be less than significant. Additionally, the project consists of the redevelopment of the existing William J. Payne Sports Park that already

contains sensitive receptors. Therefore, the project would not place sensitive receptors closer to existing sources of odor compared to the existing visitors. Impacts would be less than significant.

Mitigation Measures

MM AIR-1 The Lead Agency shall require the construction contractor to implement the following Basic Construction Emission Control Measures:

a. All active construction areas shall be watered at least two times per day.
b. All exposed non-paved surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and access roads) shall be watered at least three times per day and/or non-toxic soil stabilizers shall be applied to exposed non-paved surfaces.
c. All haul trucks transporting soil, sand, or other loose material off-site shall be covered and/or shall maintain at least two feet of freeboard.
d. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
e. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
f. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
g. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes, as required by the California Airborne Toxics Control Measure, California Code of Regulations Title 13, Section 2485. Clear signage regarding idling restrictions shall be provided for construction workers at all access points.
h. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
i. The prime construction contractor shall post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. The Lead Agency and the construction contractor shall take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
4. Biological Resources *Would the project:*				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on 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 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?	☐	☐	☐	☒

This analysis is based on a site visit by FCS biologists on August 22, 2018. In addition, descriptions and analysis in this section are based on results from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) and the United States Fish and Wildlife Service (USFWS) database searches. Supporting information is provided in Appendix B.

Environmental Evaluation

Would the project:

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

Less than significant impact with mitigation incorporated. For the purpose of this analysis, special-status species refers to all species formally listed as threatened and/or endangered under the Endangered Species Act (ESA) or California Endangered Species Act (CESA); California Species of Special Concern; designated as Fully Protected by CDFW; given a status of 1A, 1B, or 2 by California Native Plant Society (CNPS); or designated as special-status by city, county, or other regional planning documents. Federal and State listed threatened and/or endangered species are legally protected under ESA/CESA. The designated special-status species listed by CNPS have no direct legal protection, but require an analysis of the significance of potential impacts under CEQA guidelines.

Special-status plant and wildlife species typically occur in undeveloped areas. Although it is less likely, it is also possible for them to occur within developed areas. The project site contains characteristics of land that has been developed or disturbed, including disturbed soils, impervious surfaces, and structures, present on-site. 12 special-status plant species and 16 special-status wildlife species were evaluated for their potential to occur on project site, based on their ecology and regional occurrences within USGS Livermore, California 7.5-minute quadrangle. Potential impacts occurring to special-status species, if they were found on-site, would likely be significant.

Special-Status Plant Species

Twelve special status plant species, one of which is endangered at the federal and State level, have been recorded with the potential to occur within the project site based on CNDDB and CNPS database searches, but due to the prior grading and disturbance events, none are expected to occur on-site and no mitigation measures are recommended. A plant's potential to occur on the project site was based on the presence of suitable habitats, soil types, and occurrences recorded by the USFWS, CNPS or CNDDB within the Livermore quadrangle, and field observations made during the August 22, 2018, site survey by FCS biologists. Based on the high level of disturbance and lack of suitable soil types within project boundaries, it was determined that all 12 special-status plant species are considered unlikely to occur on the project site. Many of the listed plants require vernal pools, alkaline soils, or a coastal scrub habitat, all of which are absent at the site. All of the habitat requirements for each individual species and the likelihood that the species will occur within the project boundaries can be found in the special-status species table (Appendix B).

Special-Status Wildlife

As noted above, 16 special-status wildlife species, ten of which are listed at the federal or State level or protected in California as Species of Special Concern (Appendix B), were evaluated as to their potential to occur on project site. The habitat requirements for each individual species and the justification of its exclusion from the project site can be found in the special-status species table

(Appendix B). Because of the highly urbanized nature of the project site and previous development efforts coupled with an overall lack of suitable habitat, no special-status wildlife species have the potential to occur within the project boundaries. While the burrowing owl (*Athene cunicularia*) does prefer dry, open habitats dominated by annual or perennial plants, which is present on the proposed site, the high level of disturbance surrounding and within the site preclude the presence of the species. However, the project site and its adjacent areas contain ornamental trees and vegetation that may provide potential habitat for bird species protected under the Migratory Bird Treaty Act.

Construction activities could disturb nesting and breeding birds in trees and shrubs within and around the construction site. Potential impacts on special-status and migratory birds that could result from the construction and operation of the project include the destruction of eggs or occupied nests, mortality of young, and the abandonment of nests with eggs or young birds prior to fledging. If these species were found to be present, impacts to these species would be significant. The proposed removal of trees located on-site have the potential to impact roosting bats, thus Mitigation Measure BIO-1 will reduce impacts to nesting bird species to a less then significant level.

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

No impact. The project site consists entirely of developed land with areas of ornamental vegetation including ruderal weedy species concentrated toward the western portion of the project site. There are no critical or sensitive habitats found within the project site. Additionally, the project site does not contain any riparian habitat. No further studies or regulatory permitting would be required, as no impacts to any sensitive natural communities are expected from project design.

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?

No impact. The project site does not contain any wetlands or other areas designated as Waters of the United States and no further studies or regulatory permitting would be required. The area near the stormwater basin not contain any hydrophytic obligate wetland plant species, the stormwater basin area is dominated by invasive species, such as rabbits foot grass (*Polypogon monspeliensis*), yellow star-thistle (*Centaurea solstitialis*) and wild oats (*Avena sativa*). Moreover, there was no evidence of redoximorphic features in the soil as well as no evidence of prolonged hydrological conditions. Therefore, the project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

Less than significant impact. The project site is surrounded by urban development and infrastructure. Additionally, a chain link fence surrounds almost the entirety of the site. Although

certain mammals adapted to urban environments may be found on-site (e.g., squirrels, raccoons, skunks, etc.), the site does not provide the necessary elements to allow substantial wildlife movement. Impacts would be less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than significant with mitigation incorporated. According to the development plan of the proposed project, it is anticipated that 30 of the approximately 95 trees on-site will be preserved. These trees will primarily be located along the southeast perimeter of Patterson Pass Road and the eastern perimeter of South Vasco Road. The remaining 65 trees that will be removed will be subject to the guidelines and regulations set forth by the City of Livermore and County of Alameda. The City of Livermore Tree Preservation Ordinance Chapter 12.20 lists the different qualifications that a tree may have that will require a Tree Removal Permit from the City. A certified arborist will be required to conduct a tree assessment previous to development to determine if any of the 65 trees that are proposed for removal will require a permit. To ensure compliance with City of Livermore Tree Preservation Ordinances, Mitigation Measure BIO-2, requiring the Lead Agency to conduct an arborist tree survey demonstrates compliance with the applicable tree removal and replacement requirements or tree protection requirements, is recommended. The implementation of this mitigation measure would reduce impacts to a less than significant level.

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?

No impact. The project site is located with the boundaries of the Warmington Homes Assumption of The Bluffs Habitat Conservation Plan and as such will have to abide by all rules and regulations the plan puts forth. It specifically is in place to protect the San Joaquin kit fox and California tiger salamander, both of which are highly unlikely to occur on-site. Additionally, the site is within the East Alameda County Conservation strategy and will have to follow all goals and policies set forth regarding the protection of natural communities, minimizing project-level impacts, preserving connections between key habitat areas, and restoring natural communities. No impact would occur.

Mitigation Measures

MM BIO-1 If tree removal associated with development of the property is to occur during nesting bird season (February 15 through August 31), a qualified biologist shall conduct a pre-construction survey for nesting birds to identify any potential nesting activity. The pre-construction surveys for nesting birds shall be conducted within 14 days prior to any construction-related activities (grading, ground clearing, etc.). If nesting birds are identified on-site, a buffer (e.g., 250 feet for raptors, 100 feet for native songbirds) shall be maintained around the nests; no construction-related activities shall be permitted within the buffer. A qualified biologist shall monitor the nests, and construction activities may commence within the buffer area at the discretion and in the presence of the biological monitor. The pre-construction

survey for nesting birds shall not be required if construction activities occur outside of the nesting bird season (September 1 through February 14).

MM BIO-2 Prior to commencement of construction activities, the Lead Agency shall conduct an arborist tree survey and apply for the necessary permits regarding tree removal. All applicable provisions of the City of Livermore Tree Preservation Ordinance (Chapter 12.20) including removal and replacement of street trees (if applicable) and protection of significant or protected native trees during construction (if applicable). The required changes (if applicable) shall be incorporated into the proposed project.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
5. Cultural and Tribal Cultural Resources *Would the project:*				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §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 formal cemeteries?	☐	☒	☐	☐
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
e) 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	☐	☐	☒	☐
f) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Environmental Evaluation

This section describes the existing cultural resources setting and potential effects from project implementation on the project site and its surrounding area. Descriptions and analysis in this section are based on information provided by the California Native American Heritage Commission (NAHC), Northwest Information Center (NWIC), National Register of Historic Places, California Register of Historic Resources, California Historical Landmarks list, California Points of Historical Interest list, California State Historic Resources Inventory, the University of California Museum of Paleontology (UCMP) Paleontological Database, and a pedestrian survey of the site conducted by

FCS. The records search map, NAHC correspondence, historic and paleontological reports and pedestrian survey photographs are provided in Appendix C.

Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less than significant impact with mitigation incorporated. The results of the NWIC records search show that only one historic resource has been recorded within 0.5 mile of the project site, and the resource is not located within the site itself. Review of historical aerial photographs and topographic maps dating as early as 1940 show no evidence of any buildings or structures at the site. Furthermore, complete surveys of the site conducted by FCS failed to reveal any buildings, structures, or other historic resources within the project area itself. For these reasons, the potential for the proposed project to have an adverse effect on historic resources is considered low.

While unlikely, subsurface construction activities always have the potential to damage or destroy previously undiscovered historic resources. Historic resources can include wood, stone, foundations, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, and other refuse. Accordingly, implementation of Mitigation Measure CUL-1 will be required to reduce potential impacts to historic resources that may be discovered during project construction. With the incorporation of mitigation, impacts associated with historic resources would be less than significant.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than significant impact with mitigation incorporated. Records search results from the NWIC indicate that only one historic resource has been recorded within 0.5 mile of the project site. Of these resources, none are prehistoric or archaeological in nature. An intensive pedestrian survey of the project site conducted by FCS on October 10, 2016, also failed to identify additional archaeological resources within the project site. The project site is therefore considered to have low sensitivity for undiscovered archaeological resources.

While the records search and survey data indicate the likelihood of encountering archaeological resources during project construction is low, there is always a possibility that subsurface excavation may encounter previously undiscovered prehistoric archaeological resources. Such resources could consist of but are not limited to stone, bone, wood, or shell artifacts or features, including hearths and structural elements. Accordingly, this is a potentially significant impact. Implementation of Mitigation Measure CUL-1 would ensure that this potential impact is reduced to a less-than-significant level.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than significant with mitigation incorporated. Dr. Finger's report concluded that the entire project site consists of thick Holocene alluvium (Qal) deposits. Holocene alluvium is too young to be considered fossiliferous, therefore, the potential for the proposed project to have an adverse effect on paleontological resources is considered low.

Although not anticipated, sub-surface construction activities associated with the proposed project, such as grading and trenching could result in a significant impact to paleontological resources in the unlikely event late Pleistocene alluvium is encountered below the Holocene alluvium. Paleontological resources may include, but are not limited to, fossils from mammoths, saber-toothed cats, rodents, reptiles, fish, and birds. Accordingly, implementation of Mitigation Measure CUL-2 will be required to reduce potential impacts to paleontological resources that may be discovered during project construction. With the incorporation of mitigation, impacts associated with paleontological resources would be less than significant.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less than significant with mitigation incorporated. No human remains or cemeteries are known to exist within or near the project area. However, there is always the possibility that subsurface construction activities associated with the proposed project, such as trenching and grading, could potentially damage or destroy previously undiscovered human remains. Accordingly, this is a potentially significant impact. In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94, and Section 5097.98 must be followed. In the unlikely event human remains are discovered, implementation of Mitigation Measure CUL-3 would reduce this potential impact to a less than significant level.

Tribal Cultural Resources

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

e) 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

Less than significant impact. A review of the California Register of Historical Resources, local registers of historic resources, a records search conducted at the NWIC, an NAHC sacred lands file failed to identify any listed TCRs that may be adversely affected by the proposed project. As such, no known eligible or potentially eligible TCRs will adversely affected by the proposed project.

f) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than significant impact. On September 7, 2018, a response was received from the NAHC indicating that no sacred sites were listed as present in the project area. On September 25, 2018, letters including a map and project details were sent to seven Tribal Representatives identified by the NAHC as potentially having interest or information about the project area. To date, no responses have been received, and the Lead Agency has not identified additional significant TCRs meeting the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. As such, no known significant TCRs will be adversely affected by the proposed project.

Mitigation Measures

MM CUL-1 In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease and workers should avoid altering the materials until an archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology has evaluated the situation. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. The archaeologist shall make recommendations concerning appropriate measures that will be implemented to protect the resource, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered resources found during construction within the Project Site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and will be submitted to the City of Livermore, the Northwest Information Center, and the State Historic Preservation Office, as required.

MM CUL-2 In the event that fossils or fossil-bearing deposits are discovered during construction activities, excavations within a 100-foot radius of the find shall be temporarily halted or diverted. The project contractor shall notify a qualified paleontologist to examine the discovery. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall document the discovery as needed in accordance with Society of Vertebrate Paleontology standards and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If the applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the

discovery. The plan shall be submitted to the City of Livermore for review and approval prior to implementation, and the applicant shall adhere to the recommendations in the plan.

MM CUL-3 In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94, and Section 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.
2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:
   - The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission.
   - The descendant identified fails to make a recommendation.
   - The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:

- When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98. The applicant may develop a plan for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American Burials with the appropriate Native Americans as identified by the Native American Heritage Commission.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
6. Geology and Soils *Would the project:*				
a) 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? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) 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? Refer to Division of Mines and Geology Special Publication 42.

No impact. According to the California Department of Conservation, the project site is not located within an Alquist-Priolo Earthquake Fault Zone and no surface evidence of faulting has been observed. The Greenville Fault, the nearest active fault to the project site, is located approximately 1.75 miles northeast of the project site. This condition precludes the possibility of the proposed project being exposed to fault rupture. No impact would occur.

ii) Strong seismic ground shaking?

Less than significant impact. Moderate to severe earthquakes can cause strong ground shaking, which is the case for most locations within the San Francisco. However, the project does not include any structures for human occupancy, which reduces the risk of loss, injury, or death posed by earthquakes. Therefore, impacts associated with strong seismic ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less than significant. Seismic-related ground failure most commonly occurs in areas underlain by loose, unconsolidated soils (e.g., sandy soils) and high groundwater levels. According to the California Department of Conservation, the project site is located within a State-designated Liquefaction Hazard Zone.[6] These zones are areas where historical occurrence of liquefaction, or local geological, geotechnical and ground water conditions indicate a potential for permanent ground displacements such that mitigation as defined in the Public Resources Code Section 2693(c) would be required. As presented in Section 2693, the provisions governing development within a Seismic Hazard Zone are primarily concerned with the structural integrity of existing and future buildings for human occupancy. Because of the recreational nature of the project, the additional considerations of PRC Section 2693 would not directly apply to the project.

Regardless, because of its occurrence within a Seismic Hazard Zone, the project would be designed and constructed to meet all applicable seismic requirements set forth in the current CBC and the Livermore Development Code, which have been created to address structural integrity during a seismic event. Compliance with all applicable State and local requirements, coupled with the fact that the proposed project does not include any structures for human occupancy and requires

[6] Ibid.

minimal ground disturbance and grading to prepare the site for construction, would reduce the risk of loss, injury, or death posed by earthquake-induced ground failure. Therefore, impacts associated with landslides would be less than significant.

iv) Landslides?

No impact. The project site contains flat relief and is not near any significant slopes. In addition, the project site is not designated in an area that is highly susceptible to landslides in Figure 10-3 of the City of Livermore General Plan. For these reasons, no impact would occur.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant impact. Construction of the project would require earthwork activities that could potentially allow surface runoff to convey on-site sediments and pollutants off-site, thereby potentially affecting local downstream waterways by degrading water quality. Since the project would disturb one or more acres of land, the project would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity. Construction activities subject to the General Permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation. The General Permit requires implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would contain a site map(s) showing the construction perimeter, existing and proposed buildings, stormwater collection and discharge points, general pre- and post-construction topography, drainage patterns across the site, and adjacent roadways.

The SWPPP must also include project construction features (i.e., BMPs) designed to prevent erosion and protect the quality of stormwater runoff. Construction BMPs may include but are not limited to stabilized construction entrances, straw wattles on embankments, and sediment filters on existing inlets. Additionally, the SWPPP must contain a visual monitoring program and a chemical monitoring program for "non-visible" pollutants, should the BMPs fail. Section A of the Construction General Permit lists all elements that must be contained in a SWPPP. The preparation, implementation, and participation with both the NPDES General Permit and the Construction General Permit, including the SWPPP and BMPs, would reduce project construction effects on erosion to acceptable levels. Therefore, short-term construction impacts associated with erosion would be less than significant.

With regard to long-term operational impacts, the project site is currently surfaced with turf, trees and landscaping, and pavement and other impervious areas (e.g., basketball court, existing parking lot). Collectively, these surfaces help to stabilize and retain soils on the project site while preventing erosion from occurring. Therefore, long-term operational impacts associated with erosion would be less than significant.

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?

Less than significant impact. The project site is located within a State-designated Liquefaction Hazard Zone. These zones are areas where historical occurrence of liquefaction, or local geological, geotechnical and ground water conditions indicate a potential for permanent ground displacements such that mitigation as defined in the Public Resources Code Section 2693(c) would be required. As presented in Section 2693, the provisions governing development within a Seismic Hazard Zone are primarily concerned with the structural integrity of existing and future buildings for human occupancy. Because of the recreational nature of the project, the additional considerations of PRC Section 2693 would not directly apply to the project. The fact that the proposed project does not include any structures for human occupancy would reduce the risk of loss, injury, or death posed by earthquake-induced landslides. Therefore, impacts associated with landslides would be less than significant. The project site is characterized by flat relief. As previously addressed, the project would be designed and constructed to meet all applicable seismic requirements set forth in the current CBC and the Livermore Development Code. The project would be compliant with all applicable State and local requirements. For these reasons, impacts associated with unstable geologic unit would be less than significant.

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

Less than significant impact. Expansive soils, also known as shrink-swell soils, refer to the potential of soil to expand when wet and contract when dry. The United States Department of Agriculture's (USDA) Web Soil Survey, indicates that the project site is underlain by Zomora silty clay loam and Zamora silt loam. Generally, both of these soil types exhibit shrink-swell characteristics consistent with expansive soils. As previously addressed, the project would be designed and constructed to meet all applicable seismic requirements set forth in the current CBC and the Livermore Development Code, which have been created to address various soil constraints, including expansive soils. Compliance with all applicable State and local requirements, coupled with the fact that the proposed project does not include any structures for human occupancy, would reduce the risk of loss, injury, or death posed by expansive soils. Therefore, impacts associated with expansive soil would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No impact. The project's restroom facility would connect with the municipal sewer system and would not require septic tanks or similar alternative wastewater disposal system. Therefore, no impacts associated with septic tanks or similar alternative wastewater systems would occur.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
7. Greenhouse Gas Emissions *Would the project:*				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

The analysis is based on greenhouse gas emissions analysis prepared by FCS. Supporting information is provided in Appendix A.

Environmental Evaluation

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than significant impact. This analysis is restricted to GHGs identified by Assembly Bill (AB) 32, which include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The project would generate a variety of GHGs during construction and operation, including several defined by AB 32 such as carbon dioxide, methane, and nitrous oxide.

The project may also emit GHGs that are not defined by AB 32. For example, the project may generate aerosols. Aerosols are short-lived particles that remain in the atmosphere for about one week. Black carbon is a component of aerosol. Studies have indicated that black carbon has a high global warming potential; however, the Intergovernmental Panel on Climate Change states that it has a low level of scientific certainty. Water vapor could be emitted from evaporated water used for landscaping, but this is not a significant impact because water vapor concentrations in the upper atmosphere are primarily due to climate feedbacks rather than emissions from project-related activities. The project would emit nitrogen oxides and volatile organic compounds, which are ozone precursors. Ozone is a GHG; however, unlike the other GHGs, ozone in the troposphere is relatively short-lived and can be reduced in the troposphere on a daily basis. Stratospheric ozone can be reduced through reactions with other pollutants.

Certain GHGs defined by AB 32 would not be emitted by the project. Perfluorocarbons and sulfur hexafluoride are typically used in industrial applications, none of which would be used by the project. Therefore, it is not anticipated that the project would emit perfluorocarbons or sulfur hexafluoride.

An upstream emission source (also known as life cycle emissions) refers to emissions that were generated during the manufacture of products to be used for construction of the project. Upstream emission sources for the project include but are not limited emissions from the manufacture of cement, emissions from the manufacture of steel, and/or emissions from the transportation of building materials to the seller. The upstream emissions were not estimated because they are not within the control of the project and to do so would be speculative. Additionally, the California Air Pollution Control Officers Association White Paper on CEQA and Climate Change supports this conclusion by stating, "The full life-cycle of GHG emissions from construction activities is not accounted for . . . and the information needed to characterize [life-cycle emissions] would be speculative at the CEQA analysis level" (CAPCOA 2008). Therefore, pursuant to CEQA Guidelines Sections 15144 and 15145, upstream/life cycle emissions are speculative and no further discussion is necessary.

Short-term Construction Impacts

During project construction, GHGs would be generated by construction activities such as site preparation and grading/earthwork, the operation of heavy-duty construction vehicles, materials and debris hauling, asphalt paving, and construction worker vehicle trips. These emissions would be considered short-term in duration. BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions; however, BAAQMD does recommend that lead agencies quantify, disclose, and provide a significance determination for construction-related GHG emissions. Thus, the operational emissions bright-line threshold of 1,100 metric tons of carbon dioxide equivalents (MT CO_2e) per year is used for this analysis to determine significance of the project's construction-related emissions.

Construction emissions were estimated using California Emissions Estimator Model (CalEEMod) version 2016.3.2. For the purposes of providing a conservative assessment, construction of the project was assumed to start in January 2019 and last 12 months. The construction phases are anticipated to include demolition, site preparation, site grading, building construction, paving, architectural coating, and landscaping. Table 6 shows the GHG emissions estimated to be generated by project construction, indicating that the construction-related GHG emissions are below 1,100 MT CO_2e for the construction year. Therefore, construction-related GHG emissions would be less than significant on a project basis.

Table 6: Construction Greenhouse Gas Emissions

Construction Phases	On-site Emissions (MT CO_2e/year)	Off-site Emissions (MT CO_2e/year)	Total Emissions (MT CO_2e/year)
2019			
Demolition	35	14	48
Site Preparation	17	1	18
Grading	84	2	86
Building Construction	71	137	208
Paving	21	1	22

Table 6 (cont.): Construction Greenhouse Gas Emissions

Construction Phases	On-site Emissions (MT CO_2e/year)	Off-site Emissions (MT CO_2e/year)	Total Emissions (MT CO_2e/year)
Architectural Coating	3	4	6
Landscaping	71	14	85
Annual Construction Emissions	**302**	**172**	**474**
Threshold of Significance	**—**	**—**	**1,100**
Does project exceed threshold?	**—**	**—**	**No**

Note:
Calculations use unrounded numbers; therefore, totals may not appear to sum exactly due to rounding.
Source: CalEEMod Output (see Appendix A)

Long-term Operational Impacts

A preliminary screening method is provided in BAAQMD's 2017 Guidelines for operational GHGs. The preliminary screening is used to indicate whether a project's operational GHGs could potentially exceed BAAQMD's thresholds of significance. Based on BAAQMD screening criteria, the operation of a city park general land use would result in a less than significant impact if the project size is less than 600 acres. As shown in Table 7, the project is well below BAAQMD's screening threshold. Furthermore, the project involves the redevelopment of the existing William J. Payne Sports Park and would continue to support similar recreational land use activities. Because the project would not exceed the BAAQMD's screening threshold based on size, ongoing project operations would not be considered to have the potential to generate GHG emissions that would have significant impact on the environment. Therefore, long-term operation impacts associated with operational GHG emissions would be less than significant.

Table 7: Operational Greenhouse Gas Screening Level Sizes

Land Use Type	Operational Greenhouse Gas Screening Size	Project Size	Project Percent of Screening Size
City Park	600 acres	14.07 acre	2.35 percent
Source: BAAQMD 2017 Guidelines.			

b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Less than significant impact. As provided by BAAQMD's 2017 Air Quality Guidelines:

> BAAQMD's approach to developing a Threshold of Significance for GHG emissions is to identify the emissions level for which a project would not be expected to

substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move us towards climate stabilization. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant.

Thus, if a project is less than BAAQMD's threshold of significance for GHGs, it stands to reason that the project would not substantially conflict with existing California legislation adopted to reduce Statewide GHG emissions. As shown in Impact 7a), the project would not exceed the BAAQMD's applicable threshold of significance for GHGs. Therefore, the project would not substantially conflict with existing California legislation adopted to reduce Statewide GHG emissions. This analysis also analyzes the project's compliance with the Livermore Climate Action Plan (CAP).

In 2006, the California Legislature adopted Assembly Bill (AB) 32. AB 32 established a Statewide reduction goal to reduce GHG emissions back to 1990 levels by the year 2020. Consistent with the State of California's objectives outlined in AB 32, Alameda County adopted the Community Climate Action Plan), which applied to the City of Livermore. In addition, the City of Livermore adopted Climate Change Goal CLI-1.1 in its 2003 General Plan to reduce GHG emissions generated by the community to a level 15 percent less than 2008 levels in order to support State implementation of the Global Warming Solution Act (AB32). The CAP was adopted in 2012 and outlines the measures needed to achieve the emission reduction target within the community. Transportation-related emissions represent almost 38 percent of the City's GHG emission inventory in 2020. As a result, transportation-related reduction measures have great potential to reduce the City's GHG emissions. The CAP states that the measures would contribute to significant reductions in GHG emissions since the City would create a transportation and land use network that can support mixed-use and high-density development.

The measures outlined in the CAP are intended to reduce vehicle miles traveled within the community, increase energy efficiency in new and existing buildings, increase waste diversion, reduce per capita urban water use, reduce the urban heat island effect, reduce air pollution, and increase the quality of live for those within the community. Although most measures are not directly applicable to the project, which consists of the redevelopment of an existing special-use park, the project would support many of the overarching goals of the Livermore Climate Action Plan. The land use would remain the consistent with the existing land use and would support similar operational activities. Furthermore, the project would comply with all mandatory measures that apply to the project. For instance, the State has adopted regulations that could apply to the project that will help the City achieve its reduction goal. The project advances the Livermore Climate Action Plan objectives that concern water conservation because of the removal of the existing turf athletic fields and replacement with synthetic turf. The project also advances the Livermore Climate Action Plan objectives that concern urban forestry by increasing the amount of canopy trees. Emissions related to electricity consumption by the project would be reduced as the electric utility complies with the Renewable Portfolio Standard, which requires utilities to increase its mix of renewable energy sources to 33 percent by 2020. In summary, the project would not conflict with the CAP or any regulations adopted by the State of California to reduce GHG emissions. In addition, the project would comply with all mandatory local and regional measures applicable to the project. Furthermore, as evaluated in Impact 7a), the project would not

exceed the BAAQMD's applicable threshold of significance for GHGs. Considering all of this information, the project would not substantially conflict with existing California legislation adopted to reduce Statewide GHG emissions; impacts would be less than significant.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
8. Hazards and Hazardous Materials *Would the project:*				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

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

Less than significant impact. During both construction and operation of the project, hazardous or potentially hazardous materials would be handled, transported, used, and disposed of both on and off the project site. These materials include gasoline, diesel fuel, lubricants, and other petroleum-based products used to operate and maintain construction and maintenance equipment and vehicles as well as household cleaning products, degreasers, paints, and fertilizers for ongoing maintenance. Any handling of hazardous materials would be limited in both quantity and concentrations. Hazardous materials associated with operation and maintenance of construction and maintenance equipment and vehicles would be securely stored in the construction staging area within the project site, with only the required amounts of these materials being stored on-site. The actual quantity of hazardous or potentially hazardous materials that would be permitted to be stored on the project site will be determined by (1) the individual hazardous characteristics of the material, (2) manufacturer guidelines, (3) and the applicable federal, State, and local regulations. Additionally, any handling, transporting, use, or disposal would comply with the requirements of all applicable federal, State, and local agencies and regulations. This project is a continuation of the existing recreational land use activities, and implementation of the project would not result in increased impacts related to hazardous materials. Therefore, impacts associated with the routine transport, use, or disposal of hazardous materials would be less than significant.

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?

Less than significant impact. As previously addressed, any handling, transporting, use, or disposal of hazardous or potentially hazardous materials would comply with all applicable federal, State, and local agencies and regulations. Both short-term construction and long-term operation of the project would adhere to the policies and programs set forth by agencies such as the EPA, Caltrans, and Alameda County Department of Environmental Health (ACDEH). Compliance with the requirements set forth by these agencies would ensure that any interaction on the project site with hazardous materials would occur in the safest possible manner, reducing the opportunity for the accidental release of hazardous materials into the environment. Thus, the potential threat to public health and safety or the environment from upset and accident conditions involving the release of hazardous materials would be minimized with mandatory compliance with the applicable federal, State, local agencies and regulations. In addition, this project is a renovation of the existing recreational land use activities, and implementation of this project would not result in increased impacts related to hazardous materials. Therefore, impacts associated with the release of hazardous materials into the environment would be less than significant.

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

No impact. The nearest school to the project site is Arroyo Seco Elementary School, located approximately 0.84 mile southwest of the project site. As previously addressed, the project would not involve the storage, handling, or disposal of substantial quantities of hazardous or partially hazardous materials that would pose a significant health and safety risk to the public. No impact would occur.

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

No impact. The William J. Payne Sports Park has occupied the project site since 2002. A review of GeoTracker database indicates that the project site is not listed on any hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impact would occur.

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?

No impact. The project site is located approximately 5.30 miles east of the Livermore Municipal Airport and is outside of the boundaries of the applicable Airport Land Use Compatibility Plan. This condition precludes the possibility of creating an aviation safety hazard for people residing or working in the project area. No impact would occur.

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?

No impact. There are no private airstrips in the vicinity of the project site. This condition precludes the possibility of creating an aviation safety hazard for people residing or working in the project area. No impact would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No impact. The project would not substantially increase or alter vehicular circulation to and from the park, and therefore would not impair or impede emergency vehicle circulation in the surrounding area.

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?

No impact. The project site is surrounded by urban development and infrastructure; there are no areas susceptible to wildland fires near the study area. The project does not introduce any new uses or activities expected to increase the project site's susceptibility to wildfire. No impact would occur.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
9. Hydrology and Water Quality *Would the project:*				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of 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 or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures 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?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Less than significant impact. The construction of the project would require earthwork activities that could potentially allow surface runoff to convey on-site sediments and pollutants off-site, thereby potentially affecting local downstream waterways by degrading water quality. Since the project would disturb one or more acres of land, the project would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity. Construction activities subject to the General Permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation. The General Permit requires implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would generally contain a site map(s) showing the construction perimeter, existing and proposed buildings, stormwater collection and discharge points, general pre and post-construction topography, drainage patterns across the site, and adjacent roadways.

The SWPPP must also include project construction features designed to prevent erosion and protect the quality of stormwater runoff, known as BMPs. Construction BMPs may include but are not limited to stabilized construction entrances, straw wattles on embankments, and sediment filters on existing inlets. Additionally, the SWPPP must contain a visual monitoring program and a chemical monitoring program for "non-visible" pollutants, should the BMPs fail. Section A of the Construction General Permit lists all elements that must be contained in a SWPPP.

The preparation, implementation, and participation with both the NPDES General Permit and the Construction General Permit, including the SWPPP and BMPs, would reduce project construction effects on water quality to acceptable levels. Therefore, short-term construction impacts associated with water quality standards would be less than significant.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?

Less than significant impact. The William J. Payne Sports Park is an existing user of water for irrigation purposes. The proposed project would replace the existing natural grass fields (approximately 6.25 acres) with synthetic turf fields and a smaller natural grass field (approximately 2.35 acres). After accounting for additional landscaping, it would be expected that there would be no net increase in irrigation water consumption relative to existing conditions. To the extent that irrigation water is derived from groundwater sources, no net increase in production would occur. Impacts would be less than significant.

c) Substantially alter the existing drainage pattern of 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?

Less than significant impact. The William J. Payne Sports Park is served with an existing stormwater basin. The basin would be maintained in its existing location and enhanced to serve the proposed project. The purpose of the basin is to detain runoff generated from within the park during and after storm events in order to prevent inundating downstream waterways with runoff that results in erosion or siltation. Impacts would be less than significant.

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?

Less than significant impact. The William J. Payne Sports Park is served with an existing stormwater basin. The basin would be maintained in its existing location and enhanced to serve the proposed project. The purpose of the basin is to detain runoff generated from within the park during and after storm events in order to prevent inundating downstream waterways with runoff that results in flooding. Impacts would be less than significant.

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

Less than significant impact. The William J. Payne Sports Park is served with an existing stormwater basin. The basin would be maintained in its existing location and enhanced to serve the proposed project. The purpose of the basin is to detain runoff generated from within the park during and after storm events in order to prevent inundating downstream waterways with polluted runoff. Impacts would be less than significant.

f) Otherwise substantially degrade water quality?

No impact. The proposed project would not have any features such as underground storage tanks and clarifiers that could be sources of pollution to surface or groundwater resources. No impact would occur.

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?

No impact. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel 06001C0353G, a majority of the project site is located within a 500-year flood hazard area. The northern portion of the project site, which borders the Zone 7 Flood Control Channel, is adjacent to a 100-year flood hazard area. The project does not consist of any residential structures. Therefore, the project would not place any housing that may impede flood flows within a 100-year flood hazard area. No impact would occur.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No impact. As previously addressed, the majority of the project site is located within a 500-year flood hazard area. Although the northern portion of the project site is adjacent to a 100-year flood hazard area, no structures would be placed within a 100-year flood hazard area, which would impede or redirect flood flows. No impact would occur.

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?

Less than significant event. The City of Livermore General Plan Public Safety Element (Figure 10-5) indicates that the project site is not within the Del Valle Dam failure inundation area. However, the General Plan indicates that the project site is within the Patterson Dam failure inundation area (Figure 10-6). While dam failure is a remote and unlikely event, it would be speculative to engage in further discussion on this subject. Impacts would be less than significant.

j) Inundation by seiche, tsunami, or mudflow?

No impact. The project site is not near any large inland bodies of water and is approximately 24 miles east of the San Francisco Bay. This condition precludes inundation by tsunami. Additionally, the study area has not historically experienced mudflows. These conditions preclude inundation by tsunami, seiche, or mudflow. No impact would occur.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
10. Land Use and Planning *Would the project:*				
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 communities conservation plan?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) Physically divide an established community?

No impact. The physical division of an established community typically refers to the construction of a physical feature, such as an interstate highway or railroad tracks, or removal of a means of access, such as a local road or bridge that would impair mobility within an existing community or between a community and outlying area. The project site is surrounded by an established urban area. The project would renovate the park to add additional athletic facilities and amenities. This project is a continuation of the existing recreational land use activities, and implementation of the project would not physically divide an established community. Therefore, no impacts would occur.

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?

No impact. The existing Park is consistent with the "OSP—Parks, Trailways, Recreations Areas" designation of the City of Livermore General Plan and the "PDOS—Planned Development Open Space" zoning of the Livermore Development Code. The renovated park would also be consistent with these land use and zoning designations. No impact would occur.

c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?

No impact. The project site is located with the boundaries of the Warmington Homes Assumption of The Bluffs Habitat Conservation Plan and as such will have to abide by all rules and regulations the plan puts forth. It specifically is in place to protect the San Joaquin kit fox and California tiger salamander, both of which are highly unlikely to occur on-site. Additionally, the site is within the East Alameda County Conservation strategy and will have to follow all goals and policies set forth regarding the protection of natural communities, minimizing project-level impacts, preserving connections between key habitat areas, and restoring natural communities. No impact would occur.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
11. Mineral Resources *Would the project:*				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No impact. The project site contains the William J. Payne Sports Park and does support mineral extraction activities. Thus, the project would have no impact regarding the loss of availability of a known mineral resource. No impact would occur.

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?

No impact. The project site contains the William J. Payne Sports Park and does support mineral extraction activities. The City of Livermore General Plan does not identify the project site as a source of locally important mineral resources. No impact would occur.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
12. Noise *Would the project result in:*				
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 groundborne 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?	☐	☐	☐	☒

Environmental Evaluation

Would the project result in:

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?

No impact. The proposed project consists of replacing existing facilities with comparable facilities, and contemplates the same uses and overall footprint as the existing land use. The proposed project would not introduce any new noise-sensitive land uses, nor would it include a significant change in operational activities. Therefore, since the land use and operational activities would remain the same as the existing land use, the project would not expose people to noise levels in excess of established standards. No impact would occur.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact. This section analyzes construction groundborne vibration impacts. The City of Livermore has not adopted criteria for construction groundborne vibration impacts. Therefore, for purposes of this analysis, the Federal Transit Administration (FTA)[7] vibration impact criteria are utilized. The FTA has established industry accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment document.

In extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Common sources of groundborne vibration include construction activities such as blasting, pile driving, and operating heavy earthmoving equipment. However, construction vibration impacts on building structures are generally assessed in terms of peak particle velocity (PPV). For purposes of this analysis, project related impacts are expressed in terms of PPV.

Short-term Construction Vibration Impacts

Of the variety of equipment that would be used during construction, small vibratory rollers would produce the greatest groundborne vibration levels. Impact equipment such as pile drivers is not expected to be used during construction of this project. Small vibratory rollers produce groundborne vibration levels ranging up to 0.101 inch per second (in/sec) PPV at 25 feet from the operating equipment.

The closest structures to the proposed construction areas where heavy construction equipment would operate are single-family residential homes, south of the project site along Patterson Pass Road. The facade of the nearest single-family residential home could be located as close as 170 feet from the nearest construction footprint where heavy equipment would operate. At this distance, groundborne vibration levels would attenuate to less than 0.022 in/sec PPV from the operation of a small vibratory roller. This is below the industry standard vibration damage criteria of 0.12 in/sec PPV for the most sensitive type of structure—buildings extremely susceptible to vibration damage. Therefore, construction-related groundborne vibration impacts would be considered less than significant.

Operational Vibration Impacts

Implementation of the project would not include any new permanent sources that would expose persons in the project vicinity to groundborne vibration levels that could be perceptible without instruments at any existing sensitive land use in the project vicinity. Additionally, implementation of the project would not introduce new noise sensitive receptors and would therefore not expose persons to any active sources of groundborne vibration in the project vicinity. Therefore, project operational groundborne vibration level impacts would be considered less than significant.

[7] Federal Transit Administration. 2006. Transit Noise and Vibration Impact Assessment.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No impact. The proposed project consists of replacing existing facilities with comparable facilities, and contemplates the same uses and overall footprint as the existing land use. The proposed project would not introduce any new noise-sensitive land uses, nor would it include a significant change in operational activities. Therefore, the project would not result in any permanent increase in ambient noise levels in the project vicinity. No impact would occur.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Short Term Construction Impacts

Less than significant impact with mitigation incorporated. A significant impact would occur if project-related, noise producing construction activities would occur during hours other than those between 7:00 a.m. and 8:00 p.m. Monday through Friday, and 9:00 a.m. and 6:00 p.m. on Saturday.

Two types of short-term noise impacts would occur during site preparation and project construction. The first type would result from the increase in traffic flow on local streets, associated with the transport of workers, equipment, and materials to and from the project site. The transport of workers and construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the site. Because workers and construction equipment would use existing routes, noise from passing trucks would be similar to existing vehicle-generated noise on these local roadways. For this reason, short-term intermittent noise from trucks would be minor when averaged over a longer time-period and would not be expected to exceed existing peak noise levels in the project vicinity. Therefore, short-term construction-related impacts associated with worker commute and equipment transport to the project site would be less than significant.

The second type of short-term noise impact is related to noise generated during construction on the project site. Construction noise levels are rarely steady in nature and, often, fluctuate depending on the type and number of equipment being used at any given time. In addition, there could be times where large equipment is not operating and noise would be at or near normal ambient levels. Construction is completed in discrete steps, each of which has its own mix of equipment and its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction related noise ranges to be categorized by work phase.

The demolition and site preparation phases would generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes bulldozers, backhoes, front loaders, roller compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings.

Construction of the proposed project is expected to require the use of backhoes, roller compactors, front loaders, water trucks, haul trucks, and pickup trucks. Impact equipment such as pile drivers is not expected to be used during construction of this project. The maximum noise level generated by the loudest pieces of equipment that would be used on the site would range up to 85 A-weighted decibel (dBA) L_{max} at 50 feet from this operating equipment. Each doubling of sound sources with equal strength increases the noise level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, a reasonable worst-case combined noise level during this phase of construction would be 90 dBA L_{max} at a distance of 50 feet from the acoustic center of a construction area. This would result in a reasonable worst-case hourly average of 86 dBA L_{eq} at a distance of 50 feet from the acoustic center of a construction area. The acoustical center reference is used because construction equipment must operate at some distance from one another on a project site, and the combined noise level as measured at a point equidistant from the sources (acoustic center) would be the worst-case maximum noise level.

The closest noise-sensitive receptors to the proposed project site are single-family residences located south of Patterson Pass Road. The closest residence would be located approximately 180 feet from the nearest acoustic center of construction activity where multiple pieces of heavy construction equipment would potentially operate simultaneously at the project site. In addition, there is an existing 6-foot high soundwall that blocks the line of sight to the construction areas. At this distance and with the noise reduction provided by the soundwall, worst-case construction noise levels could range up to below 71 dBA L_{max} intermittently, and a worst-case hourly average of up to 67 dBA L_{eq}, at the façade of the nearest single-family residential home.

Compliance with the permissible construction hours established by the City's General Plan would reduce the effects of noise produced by construction activities on longer-term (hourly or daily) ambient noise levels, and it would reduce potential impacts that could result in annoyance or sleep disturbances at nearby sensitive receptors. The City's General Plan limits noise producing construction activities to the hours between 7:00 a.m. and 8:00 p.m., daily. Restricting construction activities to these time-periods and implementing the best management noise reduction techniques and practices outlined in MM NOI-1, would ensure that construction noise levels would not expose persons to noise levels in excess of established standards. Therefore, the potential short-term construction noise impacts on sensitive receptors in the project vicinity would be reduced to a less than significant level.

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?

No impact. The project site is not located within two miles of a public airport or within an airport land use plan. The nearest airport to the project site is the Byron Airport that is located more than 10 miles northeast of the project site. Because of its distance from the airports runways, the project site is located well outside of the airport's 55 dBA CNEL noise contours. Therefore, implementation of the project would not expose persons to excessive noise levels associated with public airport noise. No impacts associated with public airport noise would occur.

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?

No impact. The project site is not located within two miles of a private airstrip. Therefore, no impacts associated with private airstrip noise would occur.

Mitigation Measures

MM NOI-1 LARPD shall require its construction contractors to implement the following noise abatement measures during construction:

- All equipment powered by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines (i.e., idling in excess of 5 minutes) shall be prohibited.
- "Quiet" models of air compressors and other stationary noise sources shall be used unless not readily available.
- During project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from the nearest residential land uses.
- A telephone number shall be posted allowing the general public to contact LARPD or the construction contractor regarding noise complaints.
- The construction contractor shall limit construction activities to the hours between 7:00 a.m. to 8:00 p.m., daily.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
13. Population and Housing *Would the project:*				
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?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

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)?

Less than significant impact. The William J. Payne Sports Park is located within the Livermore City limits and is served with urban services and infrastructure. The Park renovation would not facilitate direct or indirect population growth, as no residential or permanent employment-generating land uses would be developed. Additionally, the project would not remove a barrier to growth, as the Park is within an urbanized portion of Livermore. Impacts would be less than significant.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No impact. The William J. Payne Sports Park is a recreational facility and does not support any residential uses. Thus, the project would not displace any existing housing. No impacts would occur.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No impact. The William J. Payne Sports Park is a recreational facility and does not support any residential uses. Thus, the project would not displace any existing housing. No impacts would occur.

Mitigation Measures

None.

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

Environmental Evaluation

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

a) Fire protection?

Less than significant impact. The Livermore-Pleasanton Fire Department currently serves the project site with fire protection and emergency medical services. The project site is located 1.43 miles from Station 6 (4550 East Avenue) and 1.50 miles from Station 8 (5750 Scenic Avenue). Using an average travel speed of 35 miles per hour, a fire engine would be able to reach the project site in 2 minutes and 27 seconds from Station 6, and 2 minutes 34 seconds from Station 8. Thus, the project site is within an area served with acceptable response time. Furthermore, although renovation of the William J. Payne Sports Park would increase utilization of the facility, this would not be expected to substantially increase calls for service as Park users would primarily be local residents and, thus, represent existing demand. For these reasons, the proposed project would not require the construction of new or the expansion of existing fire facilities. Impacts would be less than significant.

b) Police protection?

Less than significant impact. Police services in the City of Livermore are provided by the Livermore Police Department. The existing William J. Payne Sports Park is within an urbanized portion of the City of Livermore patrolled by the Police Department. Although the Park renovation would increase utilization of the facility, this would not be expected to substantially increase calls for service as Park

users would primarily be local residents and, thus, represent existing demand. For these reasons, the proposed project would not require the construction of new or the expansion of existing police facilities. Impacts would be less than significant.

c) Schools?

No impact. The William J. Payne Sports Park renovation would not facilitate direct or indirect population growth, as no residential or permanent employment-generating land uses would be developed. As such, the project would not increase enrollment in K-12 schools such that new or expanded facilities would be required. No impact would occur.

d) Parks?

Less than significant impact. The proposed project involves the renovation of the William J. Payne Sports Park, the environmental impacts of which are evaluated in this IS/MND. The renovation would occur within the existing Park boundaries and would not increase the size of the Park. The proposed project is intended to increase utilization of the Park and, thus, would not contribute to a need for new or expanded Park facilities elsewhere. Impacts would be less than significant.

e) Other public facilities?

No impact. The William J. Payne Sports Park renovation would not facilitate direct or indirect population growth, as no residential or permanent employment-generating land uses would be developed. Thus, the project would not increase the patronage of public facilities such as libraries and community centers such that new or expanded facilities would be required. No impact would occur.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
15. Recreation				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Environmental Evaluation

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

Less than significant impact. The proposed project involves the renovation of the William J. Payne Sports Park, the environmental impacts of which are evaluated in this IS/MND. The renovation would occur within the existing Park boundaries and would not increase the size of the Park. The proposed project is intended to increase utilization of the Park and, thus, would not contribute to a need for new or expanded recreational facilities elsewhere. Impacts would be less than significant.

The Livermore Area Recreation and Park District would continue to routinely maintain the Park, as well as make any necessary repairs to ensure that the Park continues to perform as intended and to prevent physical deterioration. Therefore, impacts associated with the increased use of Park and other recreational facilities would be less than significant.

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

Less than significant impact. The proposed project involves the renovation of the William J. Payne Sports Park, the environmental impacts of which are evaluated in this IS/MND. The renovation would occur within the existing Park boundaries and would not increase the size of the Park. The proposed project is intended to increase utilization of the Park and, thus, would not contribute to a need for new or expanded recreational facilities elsewhere. Impacts would be less than significant.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
16. Transportation/Traffic *Would the project:*				
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?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

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?

Less than significant impact. The William J. Payne Sports Park renovation would be expected to increase utilization of the Park and, thus, generate a net increase in the number of daily trips. However, most of these new trips would occur outside of the weekday AM and PM peak-hours, and instead occur after 6 p.m. on weekdays or on Saturdays and Sundays, which are off-peak times. As such, the proposed project would not contribute to unacceptable traffic operations during the weekday AM and PM peak-hours. Impacts would be less than significant.

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?

Less than significant impact. As the local congestion management agency, the Alameda County Transportation Commission reviews projects that may cause a net increase of 100 or more PM peak-hour trips. While the proposed project would generate an increase in daily trips, most of the new trips would occur an off-peak times and not cross the 100 PM peak-hour threshold. As such, the proposed project would have a de minis impact on congestion management agency facilities. Impacts would be less than significant.

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?

No impact. The project site is located approximately 5.30 miles east of the Livermore Municipal Airport and is outside of the boundaries of the applicable Airport Land Use Compatibility Plan. Although intermittent overhead flights may potentially occur over the project site, any air traffic would occur at such a height where safety hazards are highly unlikely. Therefore, no impacts associated with air traffic patterns would occur.

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

Less than significant impact. The proposed project would maintain the location of the existing unsignalized driveway to the William J. Payne Sports Park on Patterson Pass Road, which is aligned with Arlene Way. This access point conforms to acceptable standards of safety (e.g., provision of turn pockets, sight distance, spacing from other intersections, etc.). Although the Park renovation would be expected to increase utilization of the Park and, thus, the number of daily trips through

this access point, it would not create any roadway safety hazards because the facility is adequate to accommodate the additional trips. Impacts would be less than significant.

e) Result in inadequate emergency access?

Less than significant impact. The proposed project would continue to take vehicular access at the existing driveway location on Patterson Pass Road. This access point allows for full turning movements into and out of the Park and meets the emergency access requirements of the California Fire Code. As such, adequate emergency access would continue to be provided to and from the William J. Payne Sports Park. Impacts would be less than significant.

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?

No impact. Livermore Amador Valley Transit Authority Bus Route 20X serves the stops on South Vasco Road, located approximately 320 feet southeast of the project site. The Altamont Corridor Express Vasco Road Station is located approximately 430 feet northeast and is within walking distance of the project site. Class II bike lanes and sidewalks are provided along the project frontages with Vasco Road and Patterson Pass Road. Accordingly, the William J. Payne Sports Park is currently accessible to public transit, bicyclists, and pedestrians and would continue to be so after the Park is renovated. Furthermore, the project would enhance pedestrian accessibility with a new entry at the South Vasco Road/Patterson Pass Road intersection and internal pedestrian facilities that include perimeter walking loops around the fields. Impacts would be less than significant.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
17. Utilities and Service Systems *Would the project:*				
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Environmental Evaluation

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No impact. The proposed project would not discharge effluent into any downstream waterways. As such, it would not have the potential to except the treatment requirements of the applicable Regional Water Quality Control Board. No impact would occur.

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?

Less than significant impact. The William J. Payne Sports Park is an existing user of water for irrigation purposes. The proposed project would replace the existing natural grass fields (approximately 6.25 acres) with synthetic turf fields and a smaller natural grass field (approximately 2.35 acres). After accounting for additional landscaping, it would be expected that there would be no net increase in irrigation water consumption relative to existing conditions. As such, no new or expanded water treatment facilities would be required.

The City of Livermore Water Resources Division operates the Livermore Reclamation Plant. The Reclamation Plant has undergone four major expansions and currently processes more than 6 million gallons per day (MGD) of wastewater with a design capacity of 8.5 MGD. The proposed project would add a restroom to the Park, which would generate up to 2,000 additional gallons per day of wastewater. This represents a de minimis amount of wastewater relative to the design capacity and average daily throughput at the Reclamation Plant. As such, no new or expanded wastewater treatment facilities would be required.

Impacts would be less than significant.

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?

Less than significant impact. The William J. Payne Sports Park is served with an existing stormwater basin. The basin would be maintained in its existing location and enhanced to serve the proposed project. The purpose of the basin is to detain runoff generated from within the Park during and after storm events in order to prevent inundating downstream waterways with runoff. Impacts would be less than significant.

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

Less than significant impact. The William J. Payne Sports Park is an existing user of water for irrigation purposes. The proposed project would replace the existing natural grass fields (approximately 6.25 acres) with synthetic turf fields and a smaller natural grass field (approximately 2.35 acres). After accounting for additional landscaping, it would be expected that there would be no net increase in irrigation water consumption relative to existing conditions. As such, no new or expanded water entitlements would be required. Impacts would be less than significant.

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?

Less than significant impact. The City of Livermore Water Resources Division operates the Livermore Reclamation Plant. The Reclamation Plant has undergone four major expansions and

currently processes more than 6 MGD of wastewater per day with a design capacity of 8.5 MGD. The proposed project would add a restroom to the park, which would generate up to 2,000 additional gallons per day of wastewater. This represents a de minimis amount of wastewater relative to the design capacity and average daily throughput at the Reclamation Plant. As such, no new or expanded wastewater treatment facilities would be required.

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

Less than significant impact. The William J. Payne Sports Park is an existing solid waste generator. Demolition of the existing park facilities would generate construction and demolition debris, which would be recycled to the extent feasible. Operational activities at the renovated park would be expected to generate an increase in solid waste due to increased utilization; however, such an increase would be no more than 100 cubic yards a year. For comparison purposes, the Vasco Road Sanitary Landfill has 7.3 million cubic yards of remaining capacity and. Thus, this increase would represent a *de minimis* amount of solid waste relative to the remaining capacity. Impacts would be less than significant.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Less than significant impact. The renovated park would provide separate bins for landfill waste and recyclable materials, thereby furthering State and local policies associated with waste diversion and recycling. Impacts would be less than significant.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
18. Mandatory Findings of Significance				
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?	☐	☐	☒	☐

Environmental Evaluation

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?

Less than significant impact with mitigation incorporated. The proposed project may result in several impacts associated with biological resources and cultural resources that would be significant if left unmitigated. MM BIO-1, MM BIO-2, MM CUL-1, and MM CUL-2 would fully mitigate all potential impacts to levels of less than significant. With the implementation of these mitigation measures, the proposed project would have less than significant impacts.

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

Less than significant impact. All cumulative impacts related to air quality, noise, and traffic are either less than significant after mitigation or less than significant and do not require mitigation. Given the scope of the project and its impacts and mitigation measures, the incremental effects of this project are not considerable relative to the effects of past, current, and probably future projects. As discussed previously, the project does not have a significant cumulative traffic impact. Therefore, the proposed project would not result in cumulatively considerable impacts on these areas. Impacts would be less than significant.

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

Less than significant impact. All impacts identified in this IS/MND are either less than significant after mitigation, or less than significant and do not require mitigation. Therefore, the proposed project would not result in environmental effects that cause substantial adverse effects on human beings either directly or indirectly. Impacts would be less than significant.

Mitigation Measures

Implement MM BIO-1, MM BIO-2, MM CUL-1, MM CUL-2, and MM CUL-3.

SECTION 3: REFERENCES

Bay Area Air Quality Management District (BAAQMD). 2010. 2010 Multi Pollutant Clean Air Plan. Website: http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans. Accessed May 24, 2017.

Bay Area Air Quality Management District. 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed May 22, 2017.

Bay Area Air Quality Management District. 2017. Air Quality Standards and Attainment Status. January. Website: http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status. Accessed September 19, 2018.

Bay Area Air Quality Management District. 2017. Final 2017 Clean Air Plan. Website: 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 May 24, 2017.

CalEEMod. California Emissions Estimator Model. Version 2016.3.2. Website: http://caleemod.com/. Accessed September 18, 2018.

California Air Pollution Control Officers Association. 2008. CEQA & Climate Change, Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. Website: http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White- Paper.pdf. Accessed: December 18, 2011.

CalRecycle. Estimated Solid Waste Generation Rates. Website: https://www2.calrecycle.ca.gov/wastecharacterization/general/rates. Accessed August 2018.

CalRecycle. SWIS Facility Detail. Website: https://www2.calrecycle.ca.gov/SWFacilities/Directory/01-AA-0010/Detail/. Accessed August 2018.

City of Livermore. 2013. City of Livermore General Plan. Website: http://www.cityoflivermore.net/civicax/filebank/documents/6098. Accessed August 2018.

City of Livermore. 2016. 2015 Urban Water Management Plan. Website: http://www.cityoflivermore.net/civicax/filebank/documents/14536. Accessed July 2018.

City of Livermore. 2018. Livermore Water Reclamation Plant. Website: http://www.cityoflivermore.net/citygov/pw/public_works_divisions/wrd/water_reclamation_plant/lwrp.htm. Accessed July 2018

Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment. May.

United Nations Intergovernmental Panel on Climate Change. 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller [eds.]). Cambridge University Press,

Cambridge, United Kingdom and New York, NY, USA. Website: www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html. Accessed April 25, 2016.

United States Department of Agriculture. 2017. Web Soil Survey. Website: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed July 2018.

SECTION 4: LIST OF PREPARERS

FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597
Phone: 925.357.2562

Project Director ..... Mary Bean
Project Manager ..... Grant Gruber
Senior Air Quality Project Manager ..... Jason Paukovits
Senior Archaeologist ..... Dana DePietro, PhD
Air Quality Analyst ..... Kimber Johnson
Analyst ..... Chinmay Damle
Biologist ..... Joaquin Meckler-Pacheco
Biologist ..... Robert Carroll
Editor ..... Susie Harris
Word Processor ..... Ericka Rodriguez
GIS/Graphics ..... Karlee McCracken
Reprographics ..... Octavio Perez

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix A:
Air Quality/Greenhouse Gas Emissions Supporting Information

THIS PAGE INTENTIONALLY LEFT BLANK

William Payne Park - Construction

Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	285.00	Space	2.56	114,000.00	0
Other Non-Asphalt Surfaces	38.98	1000sqft	0.89	38,980.00	0
City Park	10.62	Acre	10.62	462,607.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	63
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction run only

Land Use - Redevelopment of an existing 14.07-acre special use park

Construction Phase - Estimated one-year construction schedule

Off-road Equipment - Estimated equipment

Demolition - Existing hardscape to be removed

Trips and VMT - Additional vendor trips estimated for the landscaping phase to account for the delivery of material

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	300.00	60.00
tblConstructionPhase	PhaseEndDate	7/13/2020	7/15/2019
tblConstructionPhase	PhaseEndDate	5/18/2020	6/17/2019
tblConstructionPhase	PhaseEndDate	6/15/2020	7/15/2019
tblConstructionPhase	PhaseStartDate	6/16/2020	6/18/2019
tblConstructionPhase	PhaseStartDate	5/19/2020	6/18/2019
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblTripsAndVMT	PhaseName		Landscaping
tblTripsAndVMT	VendorTripNumber	0.00	3.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3767	3.3235	2.4395	5.2400e-003	0.3595	0.1556	0.5151	0.1371	0.1447	0.2818	0.0000	471.6388	471.6388	0.0930	0.0000	473.9644
Maximum	**0.3767**	**3.3235**	**2.4395**	**5.2400e-003**	**0.3595**	**0.1556**	**0.5151**	**0.1371**	**0.1447**	**0.2818**	**0.0000**	**471.6388**	**471.6388**	**0.0930**	**0.0000**	**473.9644**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3767	3.3235	2.4395	5.2400e-003	0.2192	0.1556	0.3748	0.0773	0.1447	0.2220	0.0000	471.6384	471.6384	0.0930	0.0000	473.9640
Maximum	**0.3767**	**3.3235**	**2.4395**	**5.2400e-003**	**0.2192**	**0.1556**	**0.3748**	**0.0773**	**0.1447**	**0.2220**	**0.0000**	**471.6384**	**471.6384**	**0.0930**	**0.0000**	**473.9640**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**39.03**	**0.00**	**27.24**	**43.65**	**0.01**	**21.24**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2019**	**3-31-2019**	1.6699	1.6699
2	**4-1-2019**	**6-30-2019**	1.1743	1.1743
3	**7-1-2019**	**9-30-2019**	0.4537	0.4537
		Highest	1.6699	1.6699

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	1/28/2019	5	20	
2	Site Preparation	Site Preparation	1/29/2019	2/11/2019	5	10	
3	Grading	Grading	2/12/2019	3/25/2019	5	30	
4	Building Construction	Building Construction	3/26/2019	6/17/2019	5	60	
5	Paving	Paving	6/18/2019	7/15/2019	5	20	
6	Architectural Coating	Architectural Coating	6/18/2019	7/15/2019	5	20	
7	Landscaping	Trenching	7/16/2019	12/31/2019	5	121	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 3.45

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 450; Non-Residential Outdoor: 150; Striped Parking Area: 9,179

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45
Landscaping	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Landscaping	Rollers	2	8.00	80	0.38
Landscaping	Dumpers/Tenders	4	8.00	16	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	321.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	259.00	101.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	52.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Landscaping	8	20.00	3.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0347	0.0000	0.0347	5.2500e-003	0.0000	5.2500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**	**0.0347**	**0.0180**	**0.0526**	**5.2500e-003**	**0.0167**	**0.0220**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8672**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4600e-003	0.0499	8.5200e-003	1.3000e-004	2.7200e-003	1.8000e-004	2.9000e-003	7.5000e-004	1.7000e-004	9.2000e-004	0.0000	12.4198	12.4198	6.5000e-004	0.0000	12.4359
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0879	1.0879	3.0000e-005	0.0000	1.0887
Total	**2.0300e-003**	**0.0503**	**0.0129**	**1.4000e-004**	**3.9100e-003**	**1.9000e-004**	**4.0900e-003**	**1.0700e-003**	**1.8000e-004**	**1.2400e-003**	**0.0000**	**13.5077**	**13.5077**	**6.8000e-004**	**0.0000**	**13.5247**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0156	0.0000	0.0156	2.3600e-003	0.0000	2.3600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**	**0.0156**	**0.0180**	**0.0336**	**2.3600e-003**	**0.0167**	**0.0191**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8671**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4600e-003	0.0499	8.5200e-003	1.3000e-004	2.7200e-003	1.8000e-004	2.9000e-003	7.5000e-004	1.7000e-004	9.2000e-004	0.0000	12.4198	12.4198	6.5000e-004	0.0000	12.4359
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0879	1.0879	3.0000e-005	0.0000	1.0887
Total	**2.0300e-003**	**0.0503**	**0.0129**	**1.4000e-004**	**3.9100e-003**	**1.9000e-004**	**4.0900e-003**	**1.0700e-003**	**1.8000e-004**	**1.2400e-003**	**0.0000**	**13.5077**	**13.5077**	**6.8000e-004**	**0.0000**	**13.5247**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.6000e-004	2.6200e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6528	0.6528	2.0000e-005	0.0000	0.6532
Total	**3.4000e-004**	**2.6000e-004**	**2.6200e-003**	**1.0000e-005**	**7.1000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.6528**	**0.6528**	**2.0000e-005**	**0.0000**	**0.6532**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0407**	**0.0120**	**0.0526**	**0.0223**	**0.0110**	**0.0333**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.6000e-004	2.6200e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6528	0.6528	2.0000e-005	0.0000	0.6532
Total	**3.4000e-004**	**2.6000e-004**	**2.6200e-003**	**1.0000e-005**	**7.1000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.6528**	**0.6528**	**2.0000e-005**	**0.0000**	**0.6532**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5520	83.5520	0.0264	0.0000	84.2129
Total	**0.0711**	**0.8178**	**0.5007**	**9.3000e-004**	**0.1301**	**0.0357**	**0.1658**	**0.0540**	**0.0329**	**0.0868**	**0.0000**	**83.5520**	**83.5520**	**0.0264**	**0.0000**	**84.2129**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1400e-003	8.7000e-004	8.7500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.1759	2.1759	6.0000e-005	0.0000	2.1774
Total	**1.1400e-003**	**8.7000e-004**	**8.7500e-003**	**2.0000e-005**	**2.3700e-003**	**2.0000e-005**	**2.3900e-003**	**6.3000e-004**	**2.0000e-005**	**6.5000e-004**	**0.0000**	**2.1759**	**2.1759**	**6.0000e-005**	**0.0000**	**2.1774**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0586	0.0000	0.0586	0.0243	0.0000	0.0243	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5519	83.5519	0.0264	0.0000	84.2128
Total	**0.0711**	**0.8178**	**0.5007**	**9.3000e-004**	**0.0586**	**0.0357**	**0.0943**	**0.0243**	**0.0329**	**0.0572**	**0.0000**	**83.5519**	**83.5519**	**0.0264**	**0.0000**	**84.2128**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1400e-003	8.7000e-004	8.7500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.1759	2.1759	6.0000e-005	0.0000	2.1774
Total	**1.1400e-003**	**8.7000e-004**	**8.7500e-003**	**2.0000e-005**	**2.3700e-003**	**2.0000e-005**	**2.3900e-003**	**6.3000e-004**	**2.0000e-005**	**6.5000e-004**	**0.0000**	**2.1759**	**2.1759**	**6.0000e-005**	**0.0000**	**2.1774**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0708	0.6324	0.5149	8.1000e-004		0.0387	0.0387		0.0364	0.0364	0.0000	70.5313	70.5313	0.0172	0.0000	70.9608
Total	**0.0708**	**0.6324**	**0.5149**	**8.1000e-004**		**0.0387**	**0.0387**		**0.0364**	**0.0364**	**0.0000**	**70.5313**	**70.5313**	**0.0172**	**0.0000**	**70.9608**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0137	0.3875	0.0857	8.4000e-004	0.0199	2.4800e-003	0.0224	5.7600e-003	2.3700e-003	8.1300e-003	0.0000	80.7116	80.7116	4.9700e-003	0.0000	80.8359
Worker	0.0294	0.0224	0.2266	6.2000e-004	0.0614	4.4000e-004	0.0619	0.0163	4.0000e-004	0.0168	0.0000	56.3552	56.3552	1.6100e-003	0.0000	56.3954
Total	**0.0431**	**0.4099**	**0.3123**	**1.4600e-003**	**0.0813**	**2.9200e-003**	**0.0843**	**0.0221**	**2.7700e-003**	**0.0249**	**0.0000**	**137.0668**	**137.0668**	**6.5800e-003**	**0.0000**	**137.2313**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0708	0.6324	0.5149	8.1000e-004		0.0387	0.0387		0.0364	0.0364	0.0000	70.5312	70.5312	0.0172	0.0000	70.9607
Total	**0.0708**	**0.6324**	**0.5149**	**8.1000e-004**		**0.0387**	**0.0387**		**0.0364**	**0.0364**	**0.0000**	**70.5312**	**70.5312**	**0.0172**	**0.0000**	**70.9607**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0137	0.3875	0.0857	8.4000e-004	0.0199	2.4800e-003	0.0224	5.7600e-003	2.3700e-003	8.1300e-003	0.0000	80.7116	80.7116	4.9700e-003	0.0000	80.8359
Worker	0.0294	0.0224	0.2266	6.2000e-004	0.0614	4.4000e-004	0.0619	0.0163	4.0000e-004	0.0168	0.0000	56.3552	56.3552	1.6100e-003	0.0000	56.3954
Total	**0.0431**	**0.4099**	**0.3123**	**1.4600e-003**	**0.0813**	**2.9200e-003**	**0.0843**	**0.0221**	**2.7700e-003**	**0.0249**	**0.0000**	**137.0668**	**137.0668**	**6.5800e-003**	**0.0000**	**137.2313**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	3.3500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0179**	**0.1524**	**0.1467**	**2.3000e-004**		**8.2500e-003**	**8.2500e-003**		**7.5900e-003**	**7.5900e-003**	**0.0000**	**20.4752**	**20.4752**	**6.4800e-003**	**0.0000**	**20.6371**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0879	1.0879	3.0000e-005	0.0000	1.0887
Total	**5.7000e-004**	**4.3000e-004**	**4.3700e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.1900e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**1.0879**	**1.0879**	**3.0000e-005**	**0.0000**	**1.0887**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	3.3500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0179**	**0.1524**	**0.1467**	**2.3000e-004**		**8.2500e-003**	**8.2500e-003**		**7.5900e-003**	**7.5900e-003**	**0.0000**	**20.4752**	**20.4752**	**6.4800e-003**	**0.0000**	**20.6371**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e-004	4.3000e-004	4.3700e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0879	1.0879	3.0000e-005	0.0000	1.0887
Total	**5.7000e-004**	**4.3000e-004**	**4.3700e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.1900e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**1.0879**	**1.0879**	**3.0000e-005**	**0.0000**	**1.0887**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0335					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total	**0.0361**	**0.0184**	**0.0184**	**3.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**2.5533**	**2.5533**	**2.2000e-004**	**0.0000**	**2.5587**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9700e-003	1.5000e-003	0.0152	4.0000e-005	4.1100e-003	3.0000e-005	4.1400e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.7715	3.7715	1.1000e-004	0.0000	3.7742
Total	**1.9700e-003**	**1.5000e-003**	**0.0152**	**4.0000e-005**	**4.1100e-003**	**3.0000e-005**	**4.1400e-003**	**1.0900e-003**	**3.0000e-005**	**1.1200e-003**	**0.0000**	**3.7715**	**3.7715**	**1.1000e-004**	**0.0000**	**3.7742**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0335					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total	**0.0361**	**0.0184**	**0.0184**	**3.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**2.5533**	**2.5533**	**2.2000e-004**	**0.0000**	**2.5586**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9700e-003	1.5000e-003	0.0152	4.0000e-005	4.1100e-003	3.0000e-005	4.1400e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.7715	3.7715	1.1000e-004	0.0000	3.7742
Total	**1.9700e-003**	**1.5000e-003**	**0.0152**	**4.0000e-005**	**4.1100e-003**	**3.0000e-005**	**4.1400e-003**	**1.0900e-003**	**3.0000e-005**	**1.1200e-003**	**0.0000**	**3.7715**	**3.7715**	**1.1000e-004**	**0.0000**	**3.7742**

3.8 Landscaping - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0694	0.6268	0.5314	8.2000e-004		0.0384	0.0384		0.0357	0.0357	0.0000	70.9431	70.9431	0.0197	0.0000	71.4343
Total	**0.0694**	**0.6268**	**0.5314**	**8.2000e-004**		**0.0384**	**0.0384**		**0.0357**	**0.0357**	**0.0000**	**70.9431**	**70.9431**	**0.0197**	**0.0000**	**71.4343**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2000e-004	0.0232	5.1300e-003	5.0000e-005	1.1900e-003	1.5000e-004	1.3400e-003	3.4000e-004	1.4000e-004	4.9000e-004	0.0000	4.8347	4.8347	3.0000e-004	0.0000	4.8422
Worker	4.5800e-003	3.4900e-003	0.0353	1.0000e-004	9.5700e-003	7.0000e-005	9.6400e-003	2.5500e-003	6.0000e-005	2.6100e-003	0.0000	8.7760	8.7760	2.5000e-004	0.0000	8.7823
Total	**5.4000e-003**	**0.0267**	**0.0404**	**1.5000e-004**	**0.0108**	**2.2000e-004**	**0.0110**	**2.8900e-003**	**2.0000e-004**	**3.1000e-003**	**0.0000**	**13.6107**	**13.6107**	**5.5000e-004**	**0.0000**	**13.6244**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0694	0.6268	0.5314	8.2000e-004		0.0384	0.0384		0.0357	0.0357	0.0000	70.9430	70.9430	0.0197	0.0000	71.4342
Total	**0.0694**	**0.6268**	**0.5314**	**8.2000e-004**		**0.0384**	**0.0384**		**0.0357**	**0.0357**	**0.0000**	**70.9430**	**70.9430**	**0.0197**	**0.0000**	**71.4342**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2000e-004	0.0232	5.1300e-003	5.0000e-005	1.1900e-003	1.5000e-004	1.3400e-003	3.4000e-004	1.4000e-004	4.9000e-004	0.0000	4.8347	4.8347	3.0000e-004	0.0000	4.8422
Worker	4.5800e-003	3.4900e-003	0.0353	1.0000e-004	9.5700e-003	7.0000e-005	9.6400e-003	2.5500e-003	6.0000e-005	2.6100e-003	0.0000	8.7760	8.7760	2.5000e-004	0.0000	8.7823
Total	**5.4000e-003**	**0.0267**	**0.0404**	**1.5000e-004**	**0.0108**	**2.2000e-004**	**0.0110**	**2.8900e-003**	**2.0000e-004**	**3.1000e-003**	**0.0000**	**13.6107**	**13.6107**	**5.5000e-004**	**0.0000**	**13.6244**

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix B:
Biological Resources Supporting Information

THIS PAGE INTENTIONALLY LEFT BLANK

B.1 - CNDDB, CNPS, and Soil Database Results

THIS PAGE INTENTIONALLY LEFT BLANK

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Livermore (3712167))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
brittlescale *Atriplex depressa*	PDCHE042L0	None	None	G2	S2	1B.2
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S3	SSC
California alkali grass *Puccinellia simplex*	PMPOA53110	None	None	G3	S2	1B.2
California horned lark *Eremophila alpestris actia*	ABPAT02011	None	None	G5T4Q	S4	WL
California linderiella *Linderiella occidentalis*	ICBRA06010	None	None	G2G3	S2S3	
California red-legged frog *Rana draytonii*	AAABH01022	Threatened	None	G2G3	S2S3	SSC
California tiger salamander *Ambystoma californiense*	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
caper-fruited tropidocarpum *Tropidocarpum capparideum*	PDBRA2R010	None	None	G1	S1	1B.1
Congdon's tarplant *Centromadia parryi ssp. congdonii*	PDAST4R0P1	None	None	G3T2	S2	1B.1
Crotch bumble bee *Bombus crotchii*	IIHYM24480	None	None	G3G4	S1S2	
ferruginous hawk *Buteo regalis*	ABNKC19120	None	None	G4	S3S4	WL
foothill yellow-legged frog *Rana boylii*	AAABH01050	None	Candidate Threatened	G3	S3	SSC
hairless popcornflower *Plagiobothrys glaber*	PDBOR0V0B0	None	None	GH	SH	1A
hoary bat *Lasiurus cinereus*	AMACC05030	None	None	G5	S4	
lesser saltscale *Atriplex minuscula*	PDCHE042M0	None	None	G2	S2	1B.1
long-styled sand-spurrey *Spergularia macrotheca var. longistyla*	PDCAR0W062	None	None	G5T2	S2	1B.2
palmate-bracted bird's-beak *Chloropyron palmatum*	PDSCR0J0J0	Endangered	Endangered	G1	S1	1B.1
prostrate vernal pool navarretia *Navarretia prostrata*	PDPLM0C0Q0	None	None	G2	S2	1B.1
saline clover *Trifolium hydrophilum*	PDFAB400R5	None	None	G2	S2	1B.2

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
San Joaquin kit fox *Vulpes macrotis mutica*	AMAJA03041	Endangered	Threatened	G4T2	S2	
San Joaquin spearscale *Extriplex joaquinana*	PDCHE041F3	None	None	G2	S2	1B.2
Sycamore Alluvial Woodland *Sycamore Alluvial Woodland*	CTT62100CA	None	None	G1	S1.1	
Townsend's big-eared bat *Corynorhinus townsendii*	AMACC08010	None	None	G3G4	S2	SSC
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
Valley Sink Scrub *Valley Sink Scrub*	CTT36210CA	None	None	G1	S1.1	
vernal pool fairy shrimp *Branchinecta lynchi*	ICBRA03030	Threatened	None	G3	S3	
western bumble bee *Bombus occidentalis*	IIHYM24250	None	None	G2G3	S1	
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
white-tailed kite *Elanus leucurus*	ABNKC06010	None	None	G5	S3S4	FP

Record Count: 30

CNPS California Native Plant Society

Plant List

Inventory of Rare and Endangered Plants

2 matches found. *Click on scientific name for details*

Search Criteria

California Rare Plant Rank is one of [1B, 2B], FESA is one of [Endangered, Threatened], CESA is one of [Endangered, Threatened, Rare], Found in Quads 3712178, 3712177, 3712176, 3712168, 3712167, 3712166, 3712158 3712157 and 3712156;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Amsinckia grandiflora	large-flowered fiddleneck	Boraginaceae	annual herb	(Mar)Apr-May	1B.1	S1	G1
Chloropyron palmatum	palmate-bracted bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct	1B.1	S1	G1

Suggested Citation

California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 27 August 2018].

Search the Inventory
Simple Search
Advanced Search
Glossary

Information
About the Inventory
About the Rare Plant Program
CNPS Home Page
About CNPS
Join CNPS

Contributors
The Calflora Database
The California Lichen Society
California Natural Diversity Database
The Jepson Flora Project
The Consortium of California Herbaria
CalPhotos

Questions and Comments
rareplants@cnps.org

Map Scale: 1:3,770 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Alameda Area, California
Survey Area Data: Version 11, Sep 13, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 11, 2015—Jun 17, 2015

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Za	Zamora silt loam, 0 to 4 percent slopes	1.4	8.0%
Zc	Zamora silty clay loam, 0 to 3 percent slopes	15.6	92.0%
Totals for Area of Interest		**17.0**	**100.0%**

B.2 - Special Status Species Tables

THIS PAGE INTENTIONALLY LEFT BLANK

Table 1: Special-status Plant Species Potentially Occurring within the Project

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]	CNPS[3]			
Atriplex depressa Brittlescale	—	—	1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, vernal pools. Usually in alkali scalds or alkali clay in meadows or annual grassland; rarely associated with riparian, marshes, or vernal pools. Elevation 1-325 m.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of vernal pools on-site	No
Atriplex minuscula lesser saltscale	—	—	1B.1	Chenopod scrub, playas, valley, and foothill grassland. In alkali sink and grassland in sandy, alkaline soils. Elevation 0-225 m.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Site lacking soil quality needed for suitable habitat.	No
Centromadia parryi ssp. *congdonii* Congdon's tarplant	—	—	1B.1	Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. Elevation 0-230 m.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of grassland habitat on-site.	No
Chloropyron palmatum palmate-bracted bird's-beak	FE	SE	1B.1	Chenopod scrub, valley and foothill grassland. Usually on Pescadero silty clay, which is alkaline, with Distichlis, Frankenia, etc. Elevation 5-155 m.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of grassland habitat on-site.	No
Extriplex joaquinana San Joaquin spearscale	—	—	1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland. In seasonal alkali wetlands or alkali sink scrub with Distichlis spicata, Frankenia, etc. Elevation 0-800 m.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of scrub habitat on-site.	No
Navarretia prostrata prostrate vernal pool navarretia	—	—	1B.1	Coastal scrub, meadow and seeps, valley and foothill grassland. Alkaline soils in grassland or in vernal pools. Mesic, alkaline sites. Elevation 3-1235 m.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of vernal pools on-site	No

Table 1 (cont.): Special-status Plant Species Potentially Occurring within the Project

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]	CNPS[3]			
Plagiobothrys glaber hairless popcornflower	—	—	1A	Meadows and seeps (alkaline), marshes and swamps (coastal salt).	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of saturated soils.	No
Puccinellia simplex California alkali grass	—	—	1B.2	Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools. Alkaline, vernally mesic. Sinks, flats, and lake margins. Elevation 1-915 m.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of scrub habitat within project boundaries.	No
Trifolium hydrophilum saline clover	—	—	1B.2	Marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools. Elevation 1-335 m.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of marshes and swamps on-site.	No
Tropidocarpum capparideum caper-fruited tropidocarpum	—	—	1B.1	Valley and foothill grassland; hillsides and annual herb grasslands. Alkaline clay. Elevation 0-360 m.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of grasslands on-site.	No
Spergularia macrotheca var. *longistyla* long-styled sand-spurrey	—	—	1B.2	Alkaline meadows and seeps; alkaline marshes and swamps. Annual herb meadows with saturated soils. Elevation 0-220 m.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of marshes and swamps on-site.	No
Amsinckia grandiflora Large-flowered fiddleneck	—	—	1B.2	Cismontane woodland, valley and foothill, annual grassland in various soils. Grows in saturated soil but not required. Elevation 275-550 m.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of woodland on-site.	No

Table 1 (cont.): Special-status Plant Species Potentially Occurring within the Project

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]	CNPS[3]			
Code Designations						
[1] Federal Status: 2015 USFWS Listing				**[2] State Status: 2015 CDFW Listing**		
ESU = Evolutionary Significant Unit is a distinctive population. **FE** = Listed as endangered under the FESA. **FT** = Listed as threatened under the FESA. **FC** = Candidate for listing (threatened or endangered) under FESA. **FD** = Delisted in accordance with the FESA. **FPD** = Federally Proposed to be Delisted. **MBTA** = protected by the Migratory Bird Treaty Act **—** = Not federally listed				**SE** = Listed as endangered under the CESA. **ST** = Listed as threatened under the CESA. **SSC** = Species of Special Concern as identified by the CDFW. **FP** = Listed as fully protected under FGC. **CFG** = FGC = protected by FGC 3503.5 **CR** = Rare in California. **—** = Not State listed		
[3] **Habitat description**: Habitat description adapted from CNDDB (CDFW 2015a).						

Table 2: Special-status Wildlife Species Potentially Occurring within the Project

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]			
Reptiles					
Emys marmorata western pond turtle	—	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 feet elevation.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. No water on-site.	No
Birds					
Agelaius tricolor tricolored blackbird	—	SSC	Forages in open habitats such as farm fields, pastures, cattle pens, large lawns. Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of pastureland on-site.	No
Athene cunicularia burrowing owl	—	SSC	Found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of grasslands, deserts, and scrublands on-site.	No
Invertebrates					
Branchinecta lynchi vernal pool fairy shrimp	FT	—	Limited to vernal pools in Oregon and California. Occasionally these tiny crustaceans will be found in habitats other than vernal pools, such as artificial pools created by roadside ditches.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. No presence of water on-site.	No
Mammals					
Vulpes macrotis mutica San Joaquin kit fox	FE	—	Found in native grasslands on the edges of the San Joaquin Valley. Need loose-textured sandy soils for burrowing, and suitable prey base.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of grasslands on-site.	No

Table 2 (cont.): Special-status Wildlife Species Potentially Occurring within the Project

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]			
Taxidea taxus American badger	—	SSC	Found in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Requires sufficient food sources (rodents), friable soils, and open, uncultivated ground. Digs large burrows.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of forests or shrub habitat on-site.	No
Corynorhinus townsendii Townsend's big-eared bat	—	SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of suitable nesting habitat on-site.	No
Amphibians					
Rana draytonii California red-legged frog	—	SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of permanent water on-site.	No
Ambystoma californiense California tiger salamander	FT	ST	Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of seasonal water on-site.	No
Rana boylii foothill yellow-legged frog	—	CT/SSC	Foothill yellow-legged frogs are found in or near rocky streams in a variety of habitats. Unlike most other ranid frogs in California, this species is rarely encountered (even on rainy nights) far from permanent water.	**Unlikely to Occur:** Lack of suitable habitat and extremely high level of disturbance at site preclude presence. Lack of permanent water on-site.	No

Table 2 (cont.): Special-status Wildlife Species Potentially Occurring within the Project

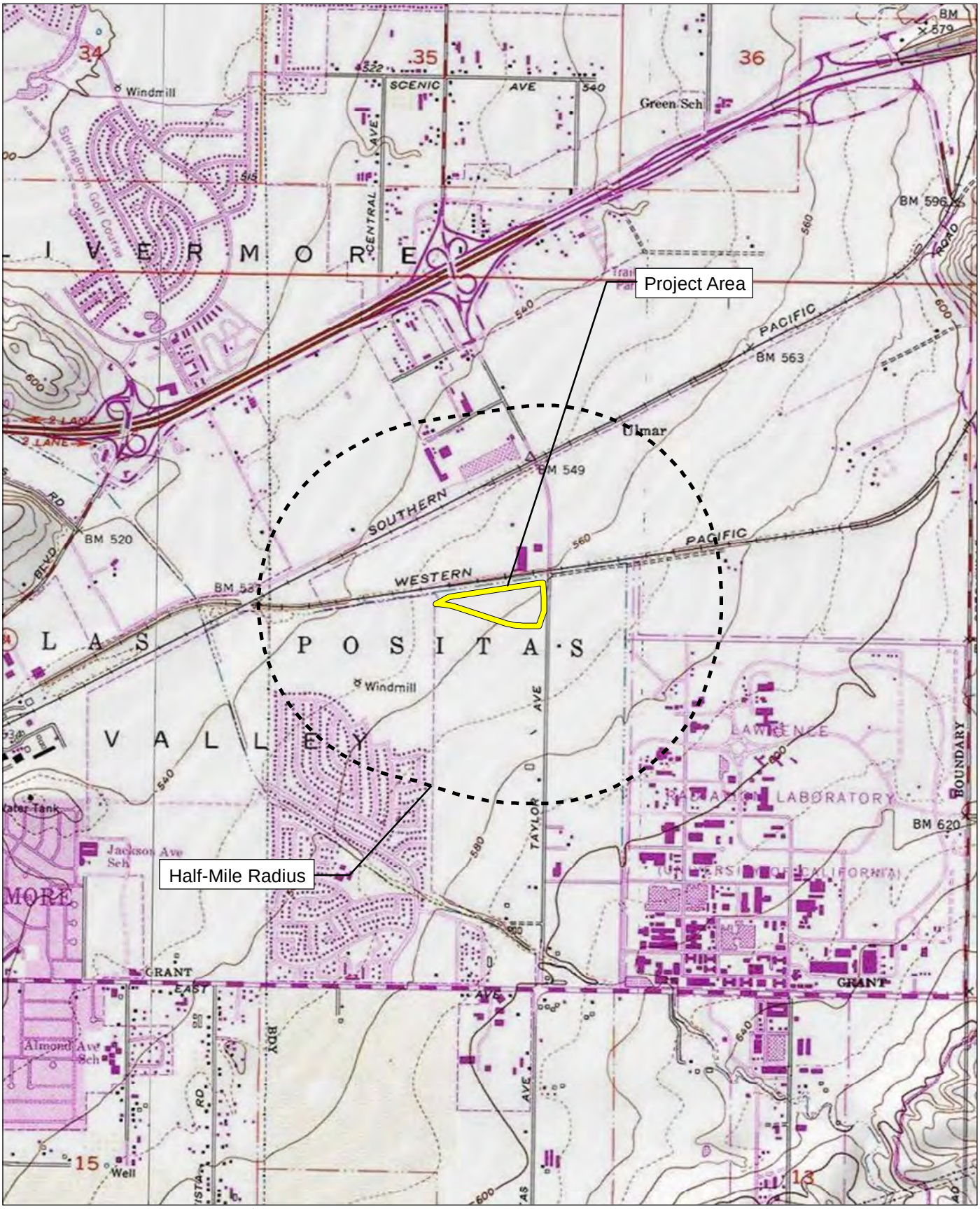
Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]			
Code Designations					
[1] **Federal Status: 2015 USFWS Listing** **ESU** = Evolutionary Significant Unit is a distinctive population. **FE** = Listed as endangered under the FESA. **FT** = Listed as threatened under the FESA. **FC** = Candidate for listing (threatened or endangered) under FESA. **FD** = Delisted in accordance with the FESA. **FPD** = Federally Proposed to be Delisted. **MBTA** = protected by the Migratory Bird Treaty Act **—** = Not federally listed			[2] **State Status: 2015 CDFW Listing** **SE** = Listed as endangered under the CESA. **ST** = Listed as threatened under the CESA. **SSC** = Species of Special Concern as identified by the CDFW. **FP** = Listed as fully protected under FGC. **CFG** = FGC = protected by FGC 3503.5 **CR** = Rare in California. **—** = Not State listed		
[3] **Habitat description**: Habitat description adapted from CNDDB (CDFW 2015a).					

Appendix C:
Cultural Resources Supporting Information

THIS PAGE INTENTIONALLY LEFT BLANK

C.1 - Non Confidential NWIC Records Search Results

THIS PAGE INTENTIONALLY LEFT BLANK



Source: USGS Altamont 7.5' Quadrangle / T3S,R2E,sec2

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map

Resource Detail: P-01-002190

Identifying information

Primary No.: P-01-002190

Trinomial: CA-ALA-000582H

Name: Western Pacific Railroad

Other IDs:

Type	*Name*
Resource Name	Western Pacific Railroad
Other	Western Pacific Railroad Tunnel #2
Other	Tunnel #2
Other	JA-003;Bridge 33-0042;Silver Springs Undercrossing
Other	WPW-8, WPW-7, WPW-10, WPW-9, WPW-6
Other	Map Reference #01-07
Other	Former 20th Century WPR Alignment
Other	Former 19th Century WPR Alignment
Other	BC-T1; Union Pacific RR Trestle at Berryessa Creek
Other	SRI-14
OHP PRN	FHWA041116A
Other	GANDA-509-15H
OHP PRN	DOE-01-98-0057-0000
OHP Property Numb	118905
Voided	P-01-001774
Voided	P-01-001777
Voided	P-01-010431
Voided	P-01-010452
Voided	P-01-010621
Voided	P-01-010625
Voided	P-01-010632
Voided	P-01-010208

Cross-refs:
Subsumes 01-001774
Subsumes 01-001777
Subsumes 01-010431
Subsumes 01-010452
Subsumes 01-010621
Subsumes 01-010625
Subsumes 01-010632
See also 01-001783
See also 01-002191
See also 01-004559
See also 01-008189
See also 01-008190
See also 01-010208
Extends into another county as 43-002654

Attributes

Resource type: Structure

Age: Historic

Information base: Survey, Analysis, Other

Attribute codes: AH02 (Foundations/structure pads); AH07 (Roads/trails/railroad grades) - railroad grade; AH16 (Other) - power line; HP01 (Unknown); HP11 (Engineering structure); HP19 (Bridge); HP37 (Highway/trail); HP39 (Other) - tunnel

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Resource Detail: P-01-002190

Recording events

	Date	Recorder(s)	Affiliation	Notes
g	6/26/1998	Elizabeth McKee	Caltrans District 4	Niles
h	12/1/1999	William Kostura	Caltrans District 4	along Nimitz freeway
n	10/28/2005	B. Larson	JRP Historical Consulting	JA-003; Bridge 33-0042
m	10/28/2005	B. Larson	JRP Historical Consulting	Tunnel #2
l	1/1/2002	Sara Palmer, Judith Marvin	LSA Associates, Inc.	between N. Livermore & Junction Avenue
p	8/21/2006	Christopher Canzonieri	[none]	
f	8/15/1997	Celia McCarthy	Port of Oakland	Ferry Slips/Mole
a	4/11/1994	[none]	Woodward-Clyde Consultants	WPW-8
l	7/23/2002	C. McMorris, A. Blosser	JRP Historical Consulting	this recording event also includes segments in Santa Clara County
j	6/8/2002	Madeline Lanz	Jones & Stokes	Former 19th Century alignment
r	2/7/2014	Dean M. Duryea, Jr.	Statistical Research, Inc.	
q	6/2/2009	T. Martin, K. Frank	GANDA	GANDA-509-15H
o	10/28/2005	B. Larson	JRP	Tunnel #2 and Bridge 33-0042
b	4/16/1994	[none]	Woodward-Clyde Consultants	WPW-7
c	4/16/1994	[none]	Woodward-Clyde Consultants	WPW-9
d	4/16/1994	[none]	Woodward-Clyde Consultants	WPW-10
e	4/17/1994	[none]	Woodward-Clyde Consultants	WPW-6
k	6/8/2002	Madeline R. Lanz	Jones & Stokes	Former 20th Century alignment

Associated reports

Report No.	Year	Title	Affiliation
S-017993	1995	Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project	Woodward-Clyde Consultants
S-022543	1998	Historic Property Survey Report for the Seismic Retrofit of Alameda Creek Bridge and Overhead (Bridge #33-0039), Alameda County, 04-ALA-84-PM 14.32, EA 14670K	California Department of Transportation
S-025526	1997	Historic Property Survey Report/Finding of Effect, 50-Foot Channel Navigation Improvements Project, Oakland Harbor, Alameda County	Basin Research Associates, Inc.; Corbett & Minor
S-027290	2002	Inventory and Evaluation Report of Cultural Resources for BART Warm Springs Extension, Alameda County, California	Jones & Stokes
S-032513	2000	Historic Property Survey Report for the Proposed Seismic Retrofit of the Interstate 880, "Fifth Avenue Overhead" in Oakland, Alameda County, 04-ALA-880 KP 47.9/49.9 (PM 30.3/30.9), EA 04-247-170601	California Department of Transportation, District 4
S-033511	2007	Cultural Resources Inventory of Caltrans District 4 Rural Conventional Highways in Alameda, Marin, Napa, San Mateo, Santa Clara, and Sonoma Counties	Far Western Anthropological Research Group, Inc.; JRP Historical Consulting
S-038390	2011	Cultural Resources Inventory of the Silicon Valley Berryessa Extension, Gas and Electric Distribution Relocation Project, Santa Clara County, California	Far Western Anthropological Research Group, Inc.
S-043685	2010	Cultural Resources Inventory for the San Joaquin Valley Right-of-Way Maintenance Environmental Assessment Project	Garcia and Associates
S-047897	2015	A Historic Property Survey and Evaluation for the Vargas Plateau Phase I Development Project, City of Fremont, Alameda County, CA	Evans & De Shazo, LLC
S-048018	2015	FCC Form 620 New Tower Submission Packet:	GSS Inc.

Resource Detail: P-01-002190

Archaeological and Historic Architecture Review for the Union Pacific Positive Train Control (PTC) Wayside Poles - Oakland Subdivision, Mile Post 33.7, Alameda County, TCNS #131543

Location information

County: Alameda

USGS quad(s): Altamont, Hayward, Livermore, Midway, Milpitas, Niles, Oakland West, San Leandro

Address:	*Address*	*City*	*Assessor's parcel no.*	*Zip code*
			0-435-05-2	
			0-440-07	
			0-455-09	
			0-455-10	

PLSS: T4S R1E Sec. 8 MDBM

UTMs: Zone 10 623860mE 4175521mN NAD83 (segment 1, 2014)
Zone 10 622725mE 4176688mN NAD83 (segment 2, 2014)
Zone 10 616490mE 4175905mN NAD83 (E end 2009)
Zone 10 616454mE 4175893mN NAD83 (W end 2009)
Zone 10 559060mE 4183600mN NAD83 (WP Mole)
Zone 10 559200mE 4183520mN NAD83 (WP Mole)
Zone 10 559240mE 4183700mN NAD83 (WP Mole)
Zone 10 559100mE 4183720mN NAD83 (WP Mole)
Zone 10 593700mE 4151200mN NAD83 (20th Century alignment)
Zone 10 591820mE 4155140mN NAD83 (20th Century alignment)
Zone 10 591527mE 4158982mN NAD27 (nwic -(west end on map) 'b')
Zone 10 598234mE 4161086mN NAD27 (nwic -(east end on map) "b")
Zone 10 598230mE 4161100mN NAD27
Zone 10 591480mE 4159070mN NAD27
Zone 10 592760mE 4160720mN NAD27 (1998 report)
Zone 10 598230mE 4161100mN NAD27 (1998 report)

Management status

Database record metadata

	Date	*User*	
Entered:	4/1/2005	icrds	
Last modified:	11/15/2016	simsa	
IC actions:	*Date*	*User*	*Action taken*
	6/26/2012	grahams	updated info
	8/17/2000	AOLPJ	Primary number 01-002190 assigned.
	4/1/2005	jay	Appended records from discontinued ICRDS.
	11/26/2014	mikulikc	Re-ordered recording events as letter designations in the ICDB, hardcopy P# file, and PDF file were not consistant. Also, updated other identifiers and removed 'district' from resource type.
	8/17/2000	AOLPJ	Trinomial ALA-000582 assigned.

Record status: Verified

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-017515		1974	Archaeological Consulting and Research Services	Archaeological Reconnaissance: Lawrence Livermore Laboratory, Livermore, California	Archaeological Consulting and Research Services	
S-017993		1995	Brian Hatoff, Barb Voss, Sharon Waechter, Stephen Wee, and Vance Bente	Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project	Woodward-Clyde Consultants	01-000231, 01-001775, 01-001776, 01-001783, 01-002190, 01-010620, 01-010629, 01-011603, 07-000091, 07-000402, 07-000438, 07-000487, 07-000488, 07-000489, 07-000490, 07-000499, 07-000500, 07-000501, 07-000502, 07-000504, 07-000806, 07-000813, 07-002402, 07-002695, 35-000334, 38-000007, 41-000009, 41-000165, 41-000169, 41-000172, 41-000310, 41-000311, 41-000410, 41-000411, 41-000412, 41-000413, 41-000414, 41-000415, 41-000416, 41-000417, 41-000418, 41-000419, 41-000420, 41-000421, 41-000422, 41-000423, 41-000424, 41-000425, 41-000456, 41-000632, 41-000808, 43-000623, 43-000649, 43-000650, 43-000903, 43-000928, 48-000179, 48-000180, 48-000207, 48-000208, 48-000549, 48-000955
S-017993a		1995		Proposed Mojave Northward Expansion Project: Appendix A - Native American Consultation	Woodward-Clyde Consultants	
S-017993b		1995		Proposed Mojave Northward Expansion Project: Appendix B - Looping Segments - Class 1	Woodward-Clyde Consultants	
S-017993c		1995		Proposed Mojave Northward Expansion Project: Appendix C -Monitoring and Emergency Discovery Plan	Woodward-Clyde Consultants	
S-017993d		1995		Proposed Mojave Northward Expansion Project: Appendix D - General Construction Information	Woodward-Clyde Consultants	
S-017993e		1995		Proposed Mojave Northward Expansion Project: Appendix E - Archaeological Site Records	Woodward-Clyde Consultants	
S-017993f		1995		Proposed Mojave Northward Expansion Project: Appendix F - Historic Features Evaluation Forms	Woodward-Clyde Consultants	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-017993g		1995		Proposed Mojave Northward Expansion Project: Appendix G - Railroad Crossing Evaluation Forms	Woodward-Clyde Consultants	
S-017993h		1995		Proposed Mojave Northward Expansion Project: Appendix H - Crossing Diagrams and Plan View Maps	Woodward Clyde Consultants	
S-017993I		1995		Proposed Mojave Northward Expansion Project: Appendix I - Railroad Depot NRHP Nomination Forms and Related Records	Woodward-Clyde Consultants	
S-017993j		1995		Proposed Mojave Northward Expansion Project: Appendix J - Looping Segment and Compressor Station Site Records	Woodward-Clyde Consultants	
S-017993k		1995		Proposed Mojave Northward Expansion Project: Appendix K - Historic Site Records / Isolate Forms	Woodward-Clyde Consultants	
S-017993l		1995		Proposed Mojave Northward Expansion Project: Appendix L - Photodocumentation	Woodward-Clyde Consultants	
S-017993m		1995		Proposed Mojave Northward Expansion Project: Appendix M - Curricula Vitae of Key Preparers	Woodward-Clyde Consultants	
S-039619		2012	James M. Allan	CEQA Cultural Resources Technical Study, Ageno Trust Project, Livermore, CA (Letter report)	William Self Associates, Inc.	
S-042881		2012	Amy E. Foutch	PG&E External Corrosion Direct Assessment (ECDA) on Line 114, Station 134+84, Livermore, California (letter report)	Far Western Anthropological Research Group Inc.	

C.2 - NAHC and Tribal Correspondence

THIS PAGE INTENTIONALLY LEFT BLANK

Local Government Tribal Consultation List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Type of List Requested

☑ **CEQA Tribal Consultation List (AB 52)** – ***Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2***

☐ **General Plan (SB 18)** - ***Per Government Code § 65352.3.***

Local Action Type:

___ General Plan ___ General Plan Element ___ General Plan Amendment

___ Specific Plan ___ Specific Plan Amendment ___ Pre-planning Outreach Activity

Required Information

Project Title: 3611.0030 William Payne Park

Local Government/Lead Agency: City of Livermore

Contact Person: Dr. Dana DePietro

Street Address: 1350 Treat Boulevard, Ste. 380

City: Walnut Creek **Zip:** 94597

Phone: 530-219-1432 **Fax:**

Email: ddepietro@fcs-intl.com

Specific Area Subject to Proposed Action

County: Alameda **City/Community:** Livermore

Project Description:

William J. Payne Sports Park is a 14-acre park located 5800 Patterson Pass Road in the City of Livermore, Alameda County, California. The semi-triangular park is bounded by a drainage channel and the Union Pacific Railroad tracks (west and north), Vasco Road (east), and Patterson Pass Road (south). The park was developed in 2002 and provides three athletic fields (including two baseball/softball diamonds), a BMX course, and parking lot with 125 spaces. The park is owned by the City of Livermore and maintained by Livermore Area Recreation and Park District (LARPD). LARPD is proposing to renovate the park to add additional athletic facilities and amenities.

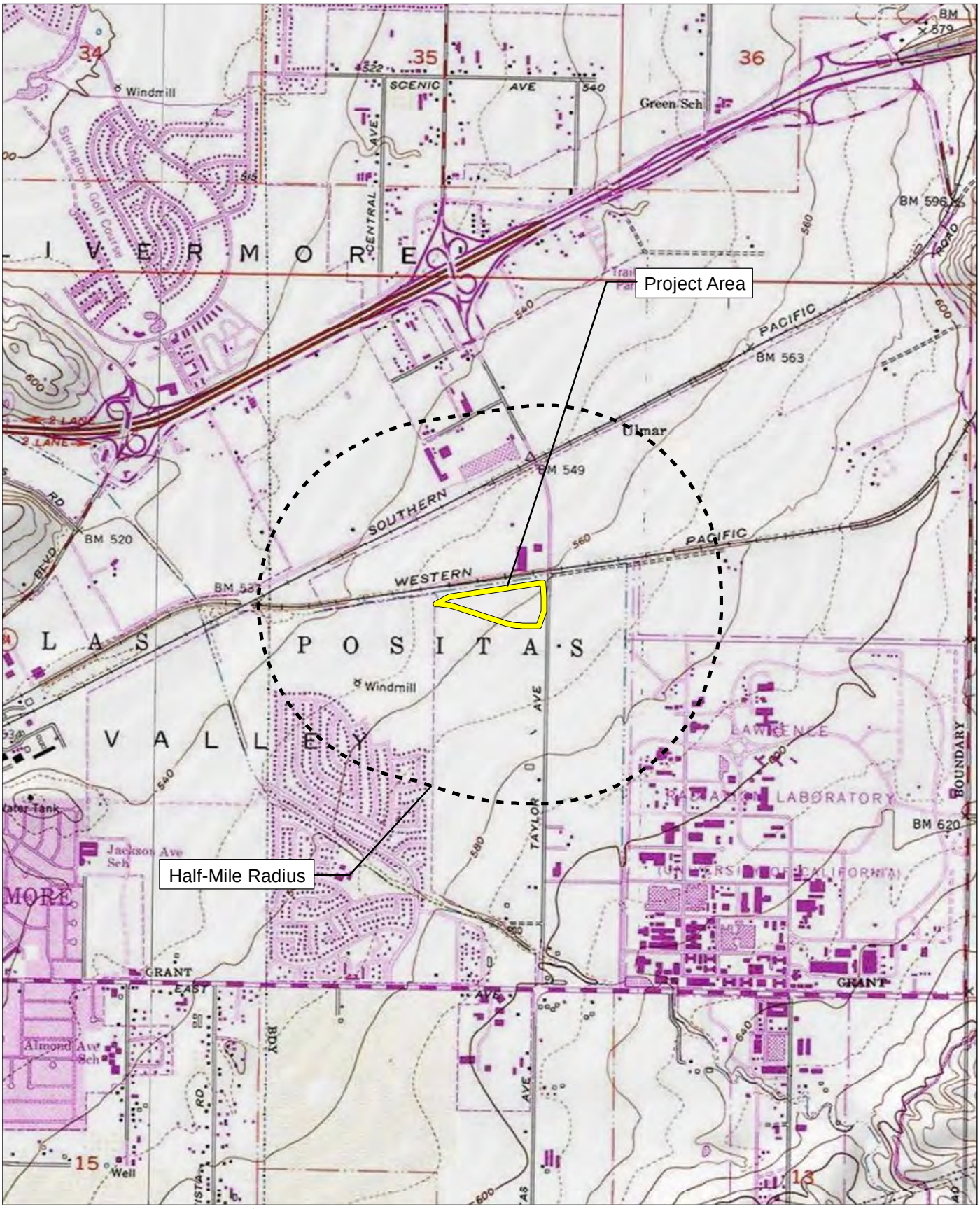
Additional Request

☑ **Sacred Lands File Search** - ***Required Information:***

USGS Quadrangle Name(s): Altamont

Township: 3S **Range:** 2E

Section(s): 2



Source: USGS Altamont 7.5' Quadrangle / T3S,R2E,sec2

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 FAX

September 7, 2018

Dr. Dana DePietro
First Carbon Solutions

Sent by Email: ddepietro@fcs-intl.com

Re: 3611.0030 William Payne Park, Alameda County

Dear Mr. Depietro,

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. Please note that the intent of the referenced codes is to avoid and or mitigate impacts to tribal cultural resources, as defined, in the California Environmental Quality Act (CEQA).

As of July 1, 2015, Public Resources Code Sections 21080.1, 21080.3.1 and 21080.3.2 require public agencies to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding or mitigating impacts to tribal cultural resources:

> Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.1(d))

The law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction. The NAHC believes that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC also believes that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the Area of Potential Effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

   - A listing of any and all known cultural resources that have already been recorded or are adjacent to the APE, such as known archaeological sites;

   - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;

- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and

- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

   - Any report that may contain site forms, site significance, and suggested mitigation measures.

     All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.

3. The results of the Sacred Lands File (SLF) check conducted through the Native American Heritage Commission with the USGS topographical information provided had negative results.

4. Any ethnographic studies conducted for any area including all or part of the potential APE; and

5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive. A negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we are able to assure that our consultation list remains current.

If you have any questions, please contact me at my email address: frank.lienert@nahc.ca.gov.

Sincerely,

Frank Lienert
Associate Government Program Analyst

Native American Heritage Commission
Tribal Consultation List
September 7, 2018

Coastanoan Rumsen Carmel Tribe
Tony Cerda, Chairperson
244 E. 1st Street
Pomona , CA 91766
rumsen@aol.com
(909) 524-8041 Cell
Ohlone/Costanoan

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister , CA 95024
ams@indiancanyon.org
(831) 637-4238
Ohlone/Costanoan

Amah MutsunTribal Band of Mission San Juan Bautista
Irenne Zwierlein, Chairperson
789 Canada Road
Woodside , CA 94062
amahmutsuntribal@gmail.com
(650) 851-7489 Cell
(650) 851-7747 Office
Ohlone/Costanoan

Muwekma Ohlone Indian Tribe of the SF Bay Area
Monica Arellano, Vice Chairwoman
20885 Redwood Road, Suite 2
Castro Valley , CA 94546
marellano@muwekma.org
(408) 205-9714
Ohlone / Costanoan

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717
Linden , CA 95236
canutes@verizon.net
(209) 887-3415
Ohlone/Costanoan
Northern Valley Yokuts
Bay Miwok

Muwekma Ohlone Indian Tribe of the SF Bay Area
Charlene Nijmeh, Chairperson
20885 Redwood Road, Suite 2
Castro Valley , CA 94546
cnijmeh@muwekma.org
(408) 464-2892
Ohlone / Costanoan

The Ohlone Indian Tribe
Andrew Galvan
P.O. Box 3388
Fremont , CA 94539
chochenyo@AOL.com
(510) 882-0527 Cell
Ohlone/Costanoan
Bay Miwok
Plains Miwok
Patwin

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097 .94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Public Resources Code Sections 210080.1, 21080.3.1 and 21080.3.2.
3611.0030 William Payne Park, Alameda County

September 25, 2018

Muwekma Ohlone Indian Tribe of the SF Bay Area
Vice Chairperson Monica Arellano
20885 Redwood Road, Suite 2
Castro Valley, CA 94546

Subject: Proposed William J. Payne Sports Park Renovation Project

Dear Vice Chairperson Arellano:

FirstCarbon Solutions (FCS) is preparing an Initial Study/Mitigated Negative Declaration (ISMND) for the proposed William J. Payne Sports Park Renovation Project on behalf of the Livermore Area Recreation and Park District. As part of the environmental review process, we are conducting a cultural resources assessment.

The Livermore Area Recreation and Park District is proposing to renovate the park to add additional athletic facilities and amenities. The existing William J. Payne Sports Park is a 14-acre park located 5800 Patterson Pass Road in the City of Livermore, Alameda County, California. The semi-triangular park is bounded by a drainage channel and the Union Pacific Railroad tracks (west and north), Vasco Road (east), and Patterson Pass Road (south). The baseball/softball diamonds, multi-purpose field, and BMX course would be removed and replaced with a lighted synthetic turf multi-purpose field, two futsal courts, a multi-purpose natural grass field, a play area, and a shaded picnic area. The parking lot would be reconfigured to provide 285 spaces. Vehicular access would be taken from the same driveway location. A walking loop would be provided around the perimeter of the synthetic turf fields and the multi-purpose natural grass field. Restrooms would be provided near the futsal courts. A pedestrian gateway would be provided at the intersection of S. Vasco Road / Patterson Pass Road. The stormwater basin would remain in the western portion of the site. The park is owned by the City of Livermore and maintained by Livermore Area Recreation and Park District (LARPD).

A Records Search map with a 0.5 mile buffer around the site is enclosed for your reference. The surrounding area is characterized by a mix of residential and commercial uses.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

UNITED STATES

Irvine
250 Commerce, Suite 250
Irvine, CA 92602

Pasadena
16 N. Marengo Avenue, Suite 303
Pasadena, CA 91101

Bay Area
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Central Valley
7265 N First Street, Suite 101
Fresno, CA 93720

Inland Empire
650 E. Hospitality Lane, Suite 125
San Bernardino, CA 92408

Sacramento Valley
2204 Plaza Drive, Suite 210
Rocklin, CA 95765

Connecticut
2 Corporate Drive, Suite 450
Shelton, CT 06484

Utah
2901 Bluegrass Blvd, Suite 200-37
Lehi, UT 84043

EUROPE

United Kingdom
Tel: +44 (0) 845.165.6245
Fax: +44 (0) 20.3070.0890
Jubilee House
Third Avenue
Marlow
United Kingdom SL7 1EY

AUSTRALIA

New South Wales
Tel: +61 (02) 9418.7822
Unit 1, 1 Skyline Place
Frenchs Forest NSW 2086
Australia

AFRICA

Kenya
Tel: +254-737-433-621
ADEC Kenya Services EPZ Ltd.
Nairobi, Kenya

ASIA

Philippines
Tel: +63 (2) 775.0632
Fax: +63 (2) 775.0632 local 8050
26th Floor, Philippine AXA Life Centre,
Sen. Gil Puyat Avenue,
Makati City, Metro Manila

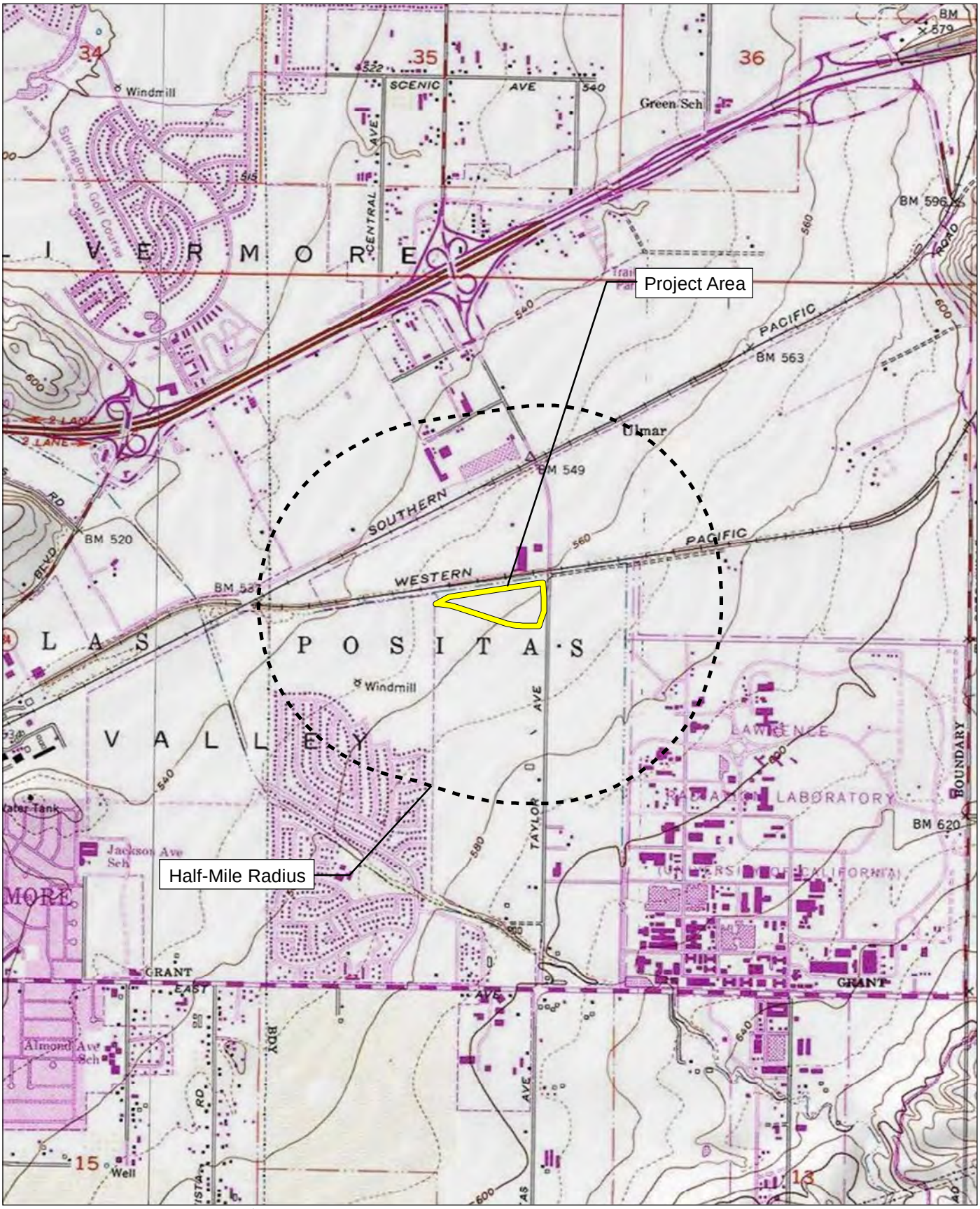
Malaysia
Tel: +603 74902112
Fax: +603 79606977
15-7, Block A, Jaya ONE
72A Jalan Universiti
46200 Petaling Jaya
Selangor, Malaysia

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Project notification and consultation requirements are being handled by designated lead agencies under CEQA and NEPA. Please feel free to contact me at 925.357.2562 or via email at ddepietro@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map for the William J. Payne Sports Park Renovation Project



Source: USGS Altamont 7.5' Quadrangle / T3S,R2E,sec2

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map

September 25, 2018

Coastanoan Rumsen Carmel Tribe
Chairperson Tony Cerda
224 E. 1st Street
Pomona, CA 91766

Subject: Proposed William J. Payne Sports Park Renovation Project

Dear Chairperson Cerda:

FirstCarbon Solutions (FCS) is preparing an Initial Study/Mitigated Negative Declaration (ISMND) for the proposed William J. Payne Sports Park Renovation Project on behalf of the Livermore Area Recreation and Park District. As part of the environmental review process, we are conducting a cultural resources assessment.

The Livermore Area Recreation and Park District is proposing to renovate the park to add additional athletic facilities and amenities. The existing William J. Payne Sports Park is a 14-acre park located 5800 Patterson Pass Road in the City of Livermore, Alameda County, California. The semi-triangular park is bounded by a drainage channel and the Union Pacific Railroad tracks (west and north), Vasco Road (east), and Patterson Pass Road (south). The baseball/softball diamonds, multi-purpose field, and BMX course would be removed and replaced with a lighted synthetic turf multi-purpose field, two futsal courts, a multi-purpose natural grass field, a play area, and a shaded picnic area. The parking lot would be reconfigured to provide 285 spaces. Vehicular access would be taken from the same driveway location. A walking loop would be provided around the perimeter of the synthetic turf fields and the multi-purpose natural grass field. Restrooms would be provided near the futsal courts. A pedestrian gateway would be provided at the intersection of S. Vasco Road / Patterson Pass Road. The stormwater basin would remain in the western portion of the site. The park is owned by the City of Livermore and maintained by Livermore Area Recreation and Park District (LARPD).

A Records Search map with a 0.5 mile buffer around the site is enclosed for your reference. The surrounding area is characterized by a mix of residential and commercial uses.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

UNITED STATES

Irvine
250 Commerce, Suite 250
Irvine, CA 92602

Pasadena
16 N. Marengo Avenue, Suite 303
Pasadena, CA 91101

Bay Area
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Central Valley
7265 N First Street, Suite 101
Fresno, CA 93720

Inland Empire
650 E. Hospitality Lane, Suite 125
San Bernardino, CA 92408

Sacramento Valley
2204 Plaza Drive, Suite 210
Rocklin, CA 95765

Connecticut
2 Corporate Drive, Suite 450
Shelton, CT 06484

Utah
2901 Bluegrass Blvd, Suite 200-37
Lehi, UT 84043

EUROPE

United Kingdom
Tel: +44 (0) 845.165.6245
Fax: +44 (0) 20.3070.0890
Jubilee House
Third Avenue
Marlow
United Kingdom SL7 1EY

AUSTRALIA

New South Wales
Tel: +61 (02) 9418.7822
Unit 1, 1 Skyline Place
Frenchs Forest NSW 2086
Australia

AFRICA

Kenya
Tel: +254-737-433-621
ADEC Kenya Services EPZ Ltd.
Nairobi, Kenya

ASIA

Philippines
Tel: +63 (2) 775.0632
Fax: +63 (2) 775.0632 local 8050
26th Floor, Philippine AXA Life Centre,
Sen. Gil Puyat Avenue,
Makati City, Metro Manila

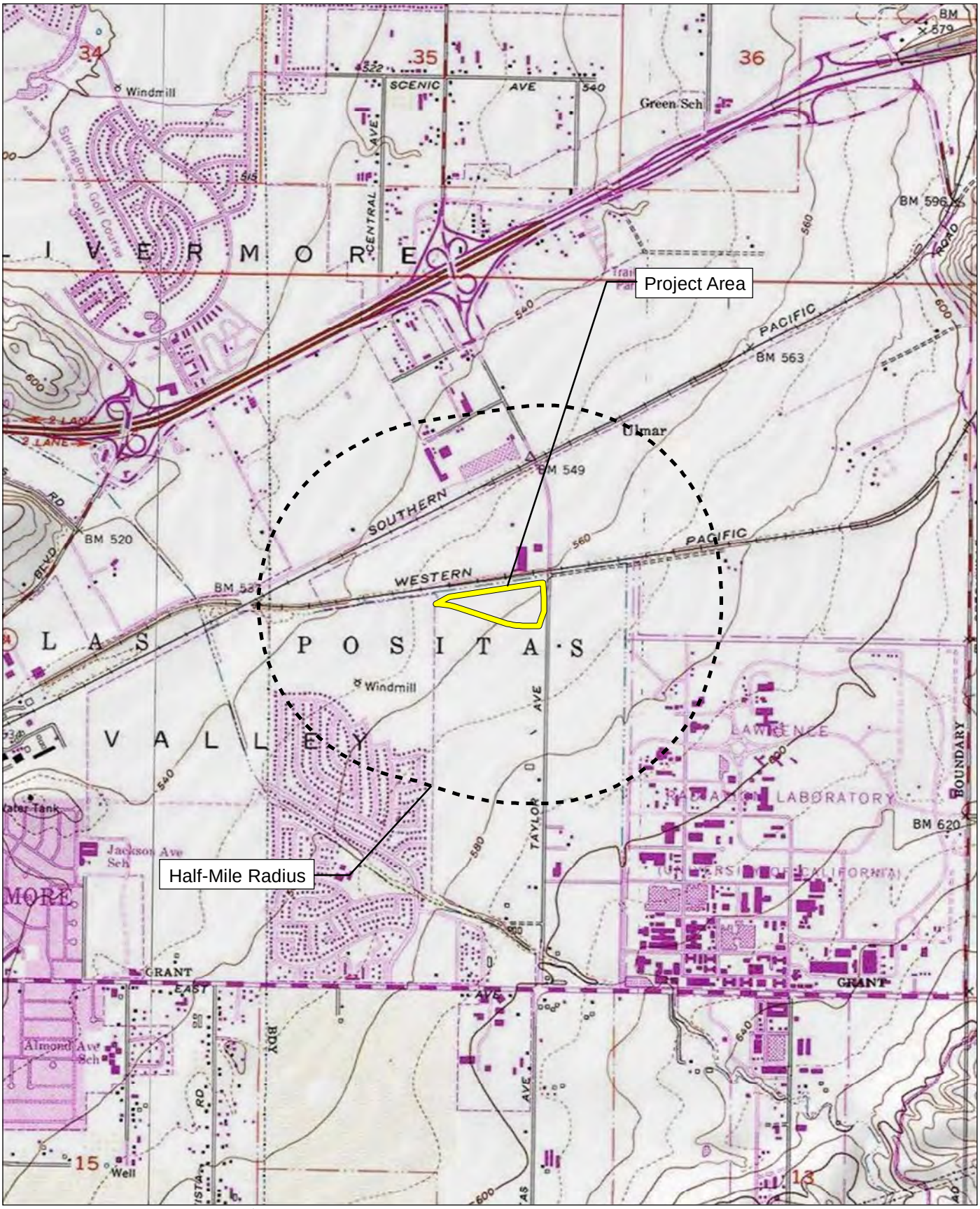
Malaysia
Tel: +603 74902112
Fax: +603 79606977
15-7, Block A, Jaya ONE
72A Jalan Universiti
46200 Petaling Jaya
Selangor, Malaysia

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Project notification and consultation requirements are being handled by designated lead agencies under CEQA and NEPA. Please feel free to contact me at 925.357.2562 or via email at ddepietro@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map for the William J. Payne Sports Park Renovation Project



Source: USGS Altamont 7.5' Quadrangle / T3S,R2E,sec2

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map

September 25, 2018

The Ohlone Indian Tribe
Andrew Galvan
P.O. Box 3388
Fremont, CA 94539

Subject: Proposed William J. Payne Sports Park Renovation Project

Dear Andrew Galvan:

FirstCarbon Solutions (FCS) is preparing an Initial Study/Mitigated Negative Declaration (ISMND) for the proposed William J. Payne Sports Park Renovation Project on behalf of the Livermore Area Recreation and Park District. As part of the environmental review process, we are conducting a cultural resources assessment.

The Livermore Area Recreation and Park District is proposing to renovate the park to add additional athletic facilities and amenities. The existing William J. Payne Sports Park is a 14-acre park located 5800 Patterson Pass Road in the City of Livermore, Alameda County, California. The semi-triangular park is bounded by a drainage channel and the Union Pacific Railroad tracks (west and north), Vasco Road (east), and Patterson Pass Road (south). The baseball/softball diamonds, multi-purpose field, and BMX course would be removed and replaced with a lighted synthetic turf multi-purpose field, two futsal courts, a multi-purpose natural grass field, a play area, and a shaded picnic area. The parking lot would be reconfigured to provide 285 spaces. Vehicular access would be taken from the same driveway location. A walking loop would be provided around the perimeter of the synthetic turf fields and the multi-purpose natural grass field. Restrooms would be provided near the futsal courts. A pedestrian gateway would be provided at the intersection of S. Vasco Road / Patterson Pass Road. The stormwater basin would remain in the western portion of the site. The park is owned by the City of Livermore and maintained by Livermore Area Recreation and Park District (LARPD).

A Records Search map with a 0.5 mile buffer around the site is enclosed for your reference. The surrounding area is characterized by a mix of residential and commercial uses.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

UNITED STATES

Irvine
250 Commerce, Suite 250
Irvine, CA 92602

Pasadena
16 N. Marengo Avenue, Suite 303
Pasadena, CA 91101

Bay Area
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Central Valley
7265 N First Street, Suite 101
Fresno, CA 93720

Inland Empire
650 E. Hospitality Lane, Suite 125
San Bernardino, CA 92408

Sacramento Valley
2204 Plaza Drive, Suite 210
Rocklin, CA 95765

Connecticut
2 Corporate Drive, Suite 450
Shelton, CT 06484

Utah
2901 Bluegrass Blvd, Suite 200-37
Lehi, UT 84043

EUROPE

United Kingdom
Tel: +44 (0) 845.165.6245
Fax: +44 (0) 20.3070.0890
Jubilee House
Third Avenue
Marlow
United Kingdom SL7 1EY

AUSTRALIA

New South Wales
Tel: +61 (02) 9418.7822
Unit 1, 1 Skyline Place
Frenchs Forest NSW 2086
Australia

AFRICA

Kenya
Tel: +254-737-433-621
ADEC Kenya Services EPZ Ltd.
Nairobi, Kenya

ASIA

Philippines
Tel: +63 (2) 775.0632
Fax: +63 (2) 775.0632 local 8050
26th Floor, Philippine AXA Life Centre,
Sen. Gil Puyat Avenue,
Makati City, Metro Manila

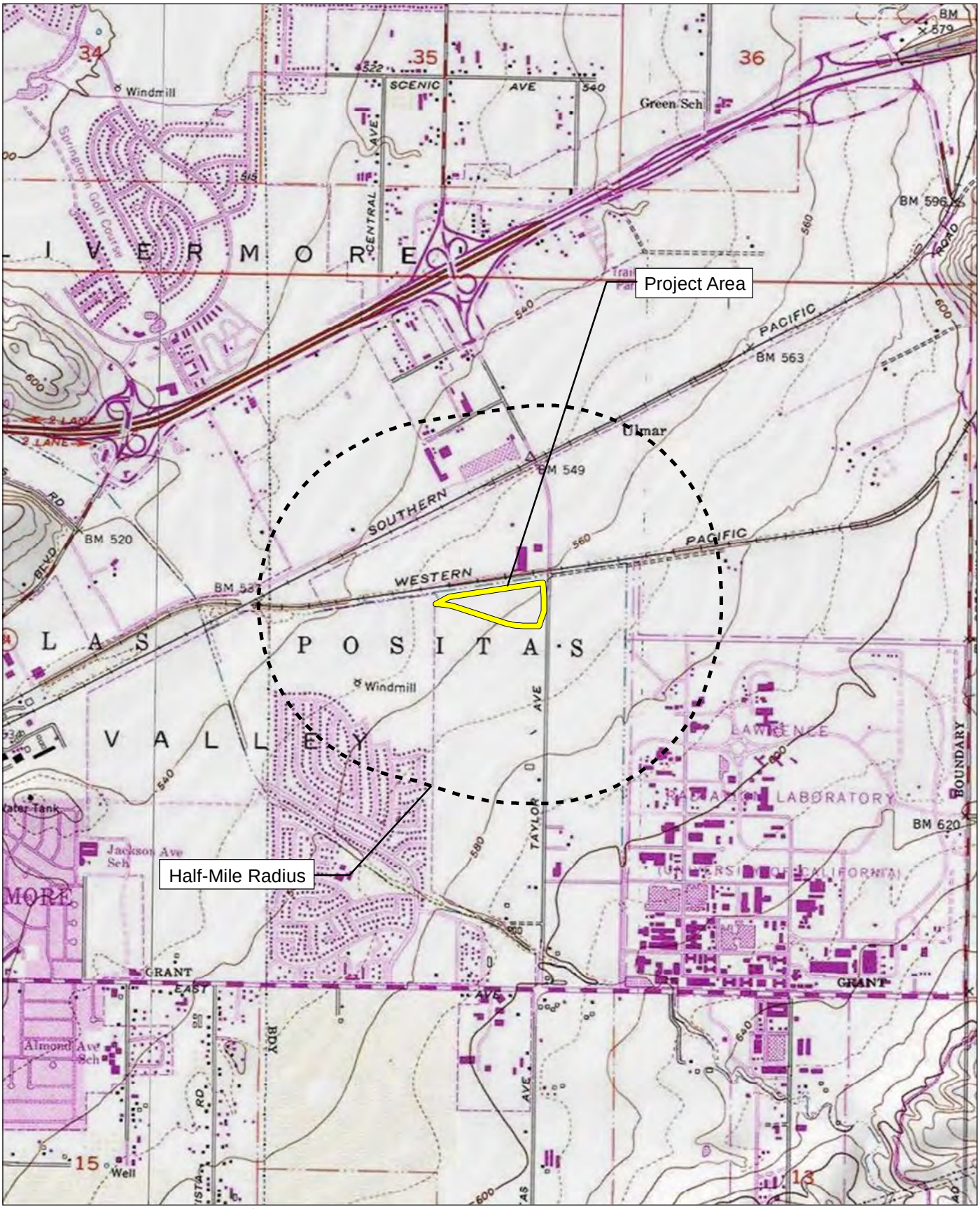
Malaysia
Tel: +603 74902112
Fax: +603 79606977
15-7, Block A, Jaya ONE
72A Jalan Universiti
46200 Petaling Jaya
Selangor, Malaysia

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Project notification and consultation requirements are being handled by designated lead agencies under CEQA and NEPA. Please feel free to contact me at 925.357.2562 or via email at ddepietro@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map for the William J. Payne Sports Park Renovation Project



Source: USGS Altamont 7.5' Quadrangle / T3S,R2E,sec2

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map

September 25, 2018

Muwekma Ohlone Indian Tribe of the SF Bay Area
Chairperson Charlene Niimeh
20885 Redwood Road, Suite 2
Castro Valley, CA 94546

Subject: Proposed William J. Payne Sports Park Renovation Project

Dear Chairperson Niimeh:

FirstCarbon Solutions (FCS) is preparing an Initial Study/Mitigated Negative Declaration (ISMND) for the proposed William J. Payne Sports Park Renovation Project on behalf of the Livermore Area Recreation and Park District. As part of the environmental review process, we are conducting a cultural resources assessment.

The Livermore Area Recreation and Park District is proposing to renovate the park to add additional athletic facilities and amenities. The existing William J. Payne Sports Park is a 14-acre park located 5800 Patterson Pass Road in the City of Livermore, Alameda County, California. The semi-triangular park is bounded by a drainage channel and the Union Pacific Railroad tracks (west and north), Vasco Road (east), and Patterson Pass Road (south). The baseball/softball diamonds, multi-purpose field, and BMX course would be removed and replaced with a lighted synthetic turf multi-purpose field, two futsal courts, a multi-purpose natural grass field, a play area, and a shaded picnic area. The parking lot would be reconfigured to provide 285 spaces. Vehicular access would be taken from the same driveway location. A walking loop would be provided around the perimeter of the synthetic turf fields and the multi-purpose natural grass field. Restrooms would be provided near the futsal courts. A pedestrian gateway would be provided at the intersection of S. Vasco Road / Patterson Pass Road. The stormwater basin would remain in the western portion of the site. The park is owned by the City of Livermore and maintained by Livermore Area Recreation and Park District (LARPD).

A Records Search map with a 0.5 mile buffer around the site is enclosed for your reference. The surrounding area is characterized by a mix of residential and commercial uses.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

UNITED STATES

Irvine
250 Commerce, Suite 250
Irvine, CA 92602

Pasadena
16 N. Marengo Avenue, Suite 303
Pasadena, CA 91101

Bay Area
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Central Valley
7265 N First Street, Suite 101
Fresno, CA 93720

Inland Empire
650 E. Hospitality Lane, Suite 125
San Bernardino, CA 92408

Sacramento Valley
2204 Plaza Drive, Suite 210
Rocklin, CA 95765

Connecticut
2 Corporate Drive, Suite 450
Shelton, CT 06484

Utah
2901 Bluegrass Blvd, Suite 200-37
Lehi, UT 84043

EUROPE

United Kingdom
Tel: +44 (0) 845.165.6245
Fax: +44 (0) 20.3070.0890
Jubilee House
Third Avenue
Marlow
United Kingdom SL7 1EY

AUSTRALIA

New South Wales
Tel: +61 (02) 9418.7822
Unit 1, 1 Skyline Place
Frenchs Forest NSW 2086
Australia

AFRICA

Kenya
Tel: +254-737-433-621
ADEC Kenya Services EPZ Ltd.
Nairobi, Kenya

ASIA

Philippines
Tel: +63 (2) 775.0632
Fax: +63 (2) 775.0632 local 8050
26th Floor, Philippine AXA Life Centre,
Sen. Gil Puyat Avenue,
Makati City, Metro Manila

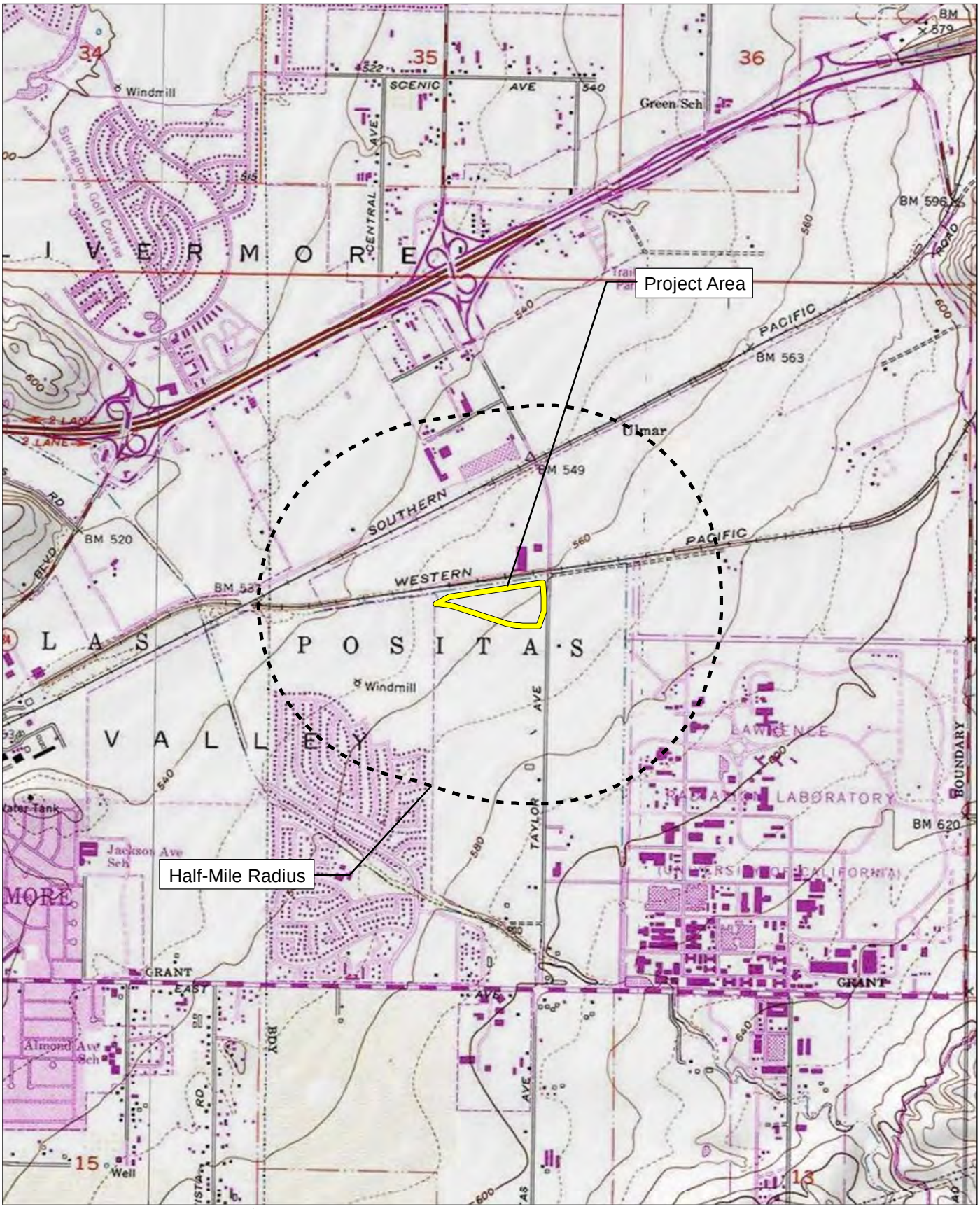
Malaysia
Tel: +603 74902112
Fax: +603 79606977
15-7, Block A, Jaya ONE
72A Jalan Universiti
46200 Petaling Jaya
Selangor, Malaysia

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Project notification and consultation requirements are being handled by designated lead agencies under CEQA and NEPA. Please feel free to contact me at 925.357.2562 or via email at ddepietro@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map for the William J. Payne Sports Park Renovation Project



Source: USGS Altamont 7.5' Quadrangle / T3S,R2E,sec2

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map

September 25, 2018

North Valley Yokuts Tribe
Chairperson Katherine Erolinda Perez
P.O. Box 717
Linden, CA 95236

Subject: Proposed William J. Payne Sports Park Renovation Project

Dear Chairperson Perez:

FirstCarbon Solutions (FCS) is preparing an Initial Study/Mitigated Negative Declaration (ISMND) for the proposed William J. Payne Sports Park Renovation Project on behalf of the Livermore Area Recreation and Park District. As part of the environmental review process, we are conducting a cultural resources assessment.

The Livermore Area Recreation and Park District is proposing to renovate the park to add additional athletic facilities and amenities. The existing William J. Payne Sports Park is a 14-acre park located 5800 Patterson Pass Road in the City of Livermore, Alameda County, California. The semi-triangular park is bounded by a drainage channel and the Union Pacific Railroad tracks (west and north), Vasco Road (east), and Patterson Pass Road (south). The baseball/softball diamonds, multi-purpose field, and BMX course would be removed and replaced with a lighted synthetic turf multi-purpose field, two futsal courts, a multi-purpose natural grass field, a play area, and a shaded picnic area. The parking lot would be reconfigured to provide 285 spaces. Vehicular access would be taken from the same driveway location. A walking loop would be provided around the perimeter of the synthetic turf fields and the multi-purpose natural grass field. Restrooms would be provided near the futsal courts. A pedestrian gateway would be provided at the intersection of S. Vasco Road / Patterson Pass Road. The stormwater basin would remain in the western portion of the site. The park is owned by the City of Livermore and maintained by Livermore Area Recreation and Park District (LARPD).

A Records Search map with a 0.5 mile buffer around the site is enclosed for your reference. The surrounding area is characterized by a mix of residential and commercial uses.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

UNITED STATES

Irvine
250 Commerce, Suite 250
Irvine, CA 92602

Pasadena
16 N. Marengo Avenue, Suite 303
Pasadena, CA 91101

Bay Area
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Central Valley
7265 N First Street, Suite 101
Fresno, CA 93720

Inland Empire
650 E. Hospitality Lane, Suite 125
San Bernardino, CA 92408

Sacramento Valley
2204 Plaza Drive, Suite 210
Rocklin, CA 95765

Connecticut
2 Corporate Drive, Suite 450
Shelton, CT 06484

Utah
2901 Bluegrass Blvd, Suite 200-37
Lehi, UT 84043

EUROPE

United Kingdom
Tel: +44 (0) 845.165.6245
Fax: +44 (0) 20.3070.0890
Jubilee House
Third Avenue
Marlow
United Kingdom SL7 1EY

AUSTRALIA

New South Wales
Tel: +61 (02) 9418.7822
Unit 1, 1 Skyline Place
Frenchs Forest NSW 2086
Australia

AFRICA

Kenya
Tel: +254-737-433-621
ADEC Kenya Services EPZ Ltd.
Nairobi, Kenya

ASIA

Philippines
Tel: +63 (2) 775.0632
Fax: +63 (2) 775.0632 local 8050
26th Floor, Philippine AXA Life Centre,
Sen. Gil Puyat Avenue,
Makati City, Metro Manila

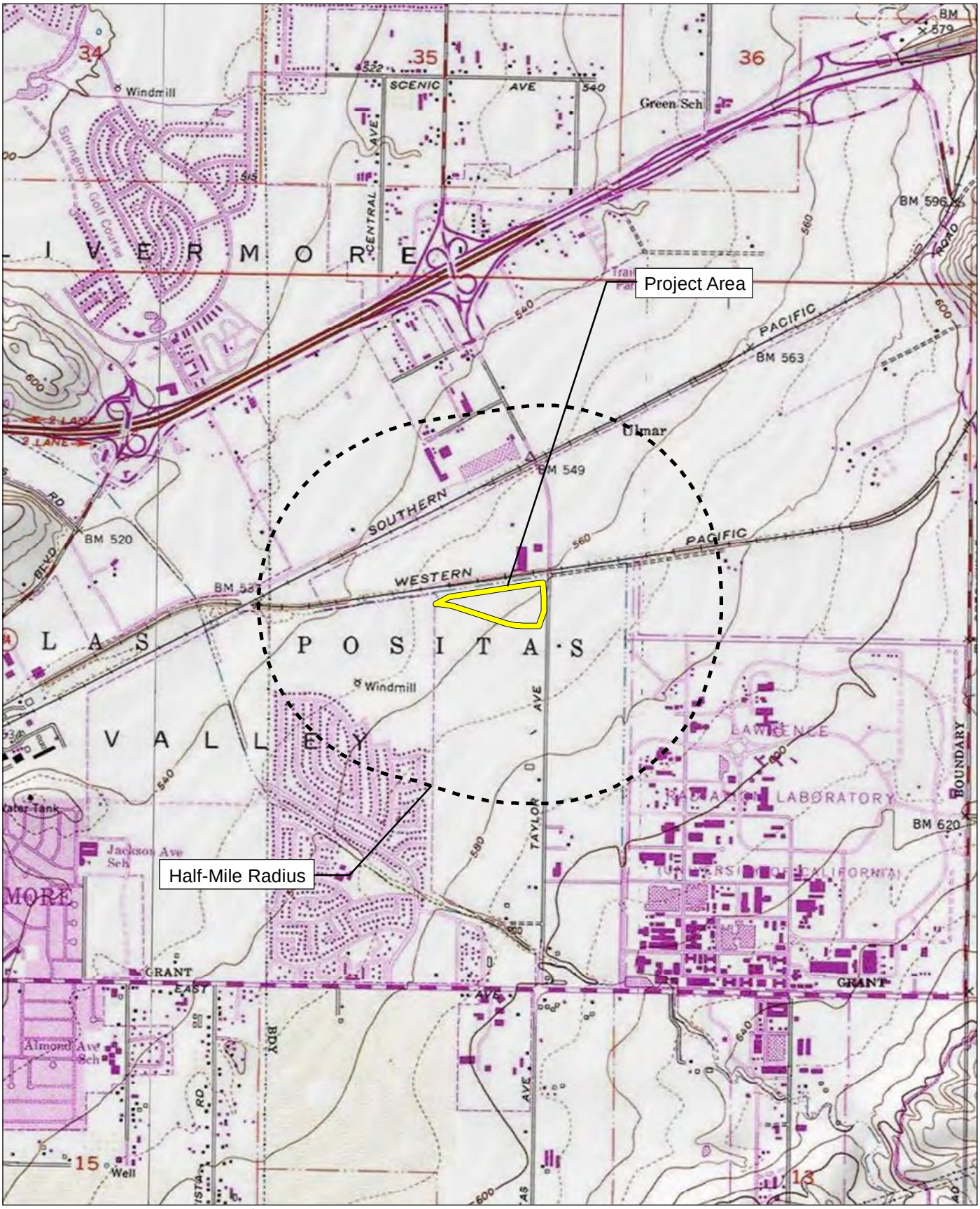
Malaysia
Tel: +603 74902112
Fax: +603 79606977
15-7, Block A, Jaya ONE
72A Jalan Universiti
46200 Petaling Jaya
Selangor, Malaysia

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Project notification and consultation requirements are being handled by designated lead agencies under CEQA and NEPA. Please feel free to contact me at 925.357.2562 or via email at ddepietro@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map for the William J. Payne Sports Park Renovation Project



Source: USGS Altamont 7.5' Quadrangle / T3S,R2E,sec2

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map

September 25, 2018

Indian Canyon Mutsun Band Costanoan
Chairperson Ann Marie Sayers
P.O. Box 28
Hollister, CA 95024

Subject: Proposed William J. Payne Sports Park Renovation Project

Dear Chairperson Sayers:

FirstCarbon Solutions (FCS) is preparing an Initial Study/Mitigated Negative Declaration (ISMND) for the proposed William J. Payne Sports Park Renovation Project on behalf of the Livermore Area Recreation and Park District. As part of the environmental review process, we are conducting a cultural resources assessment.

The Livermore Area Recreation and Park District is proposing to renovate the park to add additional athletic facilities and amenities. The existing William J. Payne Sports Park is a 14-acre park located 5800 Patterson Pass Road in the City of Livermore, Alameda County, California. The semi-triangular park is bounded by a drainage channel and the Union Pacific Railroad tracks (west and north), Vasco Road (east), and Patterson Pass Road (south). The baseball/softball diamonds, multi-purpose field, and BMX course would be removed and replaced with a lighted synthetic turf multi-purpose field, two futsal courts, a multi-purpose natural grass field, a play area, and a shaded picnic area. The parking lot would be reconfigured to provide 285 spaces. Vehicular access would be taken from the same driveway location. A walking loop would be provided around the perimeter of the synthetic turf fields and the multi-purpose natural grass field. Restrooms would be provided near the futsal courts. A pedestrian gateway would be provided at the intersection of S. Vasco Road / Patterson Pass Road. The stormwater basin would remain in the western portion of the site. The park is owned by the City of Livermore and maintained by Livermore Area Recreation and Park District (LARPD).

A Records Search map with a 0.5 mile buffer around the site is enclosed for your reference. The surrounding area is characterized by a mix of residential and commercial uses.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

UNITED STATES

Irvine
250 Commerce, Suite 250
Irvine, CA 92602

Pasadena
16 N. Marengo Avenue, Suite 303
Pasadena, CA 91101

Bay Area
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Central Valley
7265 N First Street, Suite 101
Fresno, CA 93720

Inland Empire
650 E. Hospitality Lane, Suite 125
San Bernardino, CA 92408

Sacramento Valley
2204 Plaza Drive, Suite 210
Rocklin, CA 95765

Connecticut
2 Corporate Drive, Suite 450
Shelton, CT 06484

Utah
2901 Bluegrass Blvd, Suite 200-37
Lehi, UT 84043

EUROPE

United Kingdom
Tel: +44 (0) 845.165.6245
Fax: +44 (0) 20.3070.0890
Jubilee House
Third Avenue
Marlow
United Kingdom SL7 1EY

AUSTRALIA

New South Wales
Tel: +61 (02) 9418.7822
Unit 1, 1 Skyline Place
Frenchs Forest NSW 2086
Australia

AFRICA

Kenya
Tel: +254-737-433-621
ADEC Kenya Services EPZ Ltd.
Nairobi, Kenya

ASIA

Philippines
Tel: +63 (2) 775.0632
Fax: +63 (2) 775.0632 local 8050
26th Floor, Philippine AXA Life Centre,
Sen. Gil Puyat Avenue,
Makati City, Metro Manila

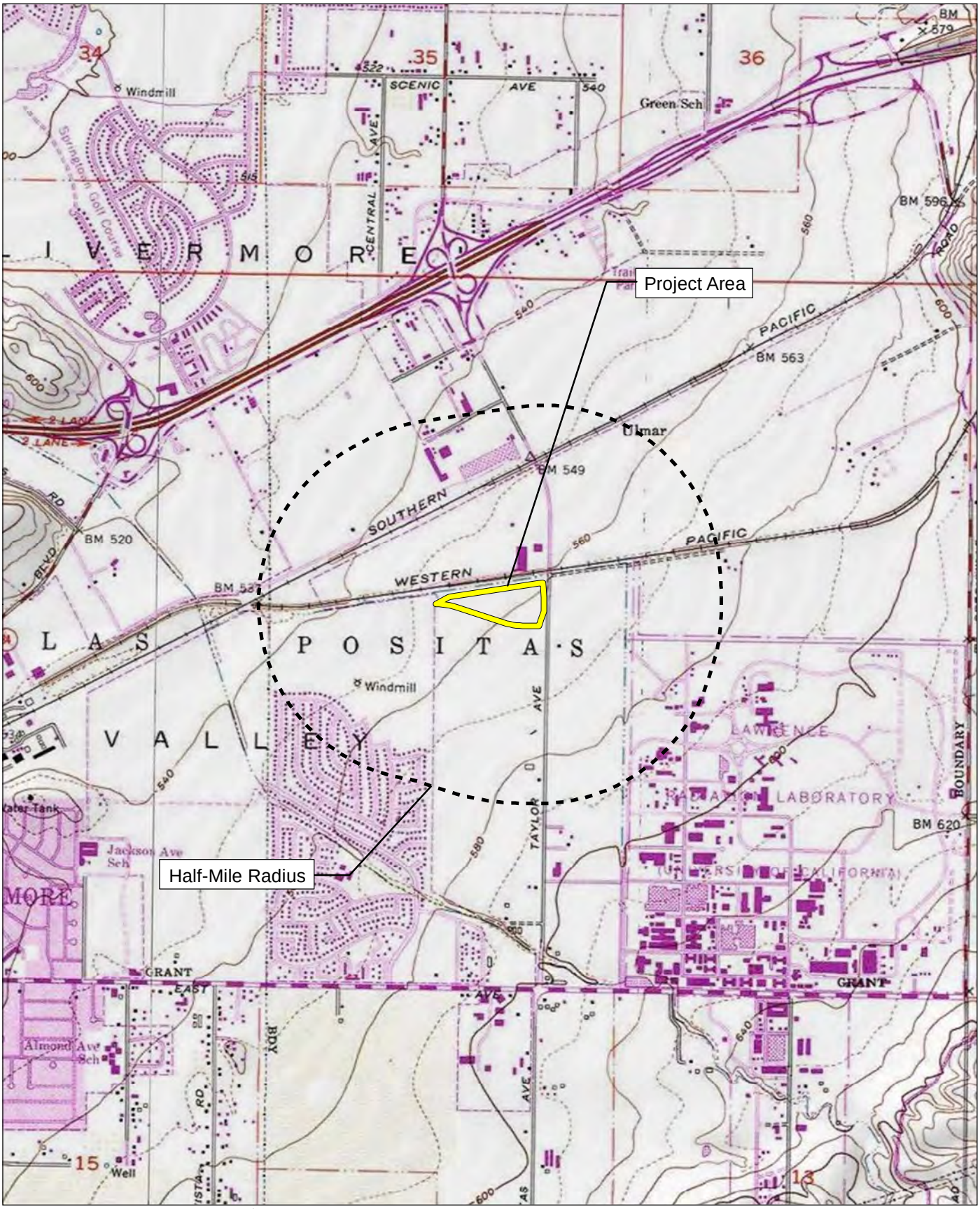
Malaysia
Tel: +603 74902112
Fax: +603 79606977
15-7, Block A, Jaya ONE
72A Jalan Universiti
46200 Petaling Jaya
Selangor, Malaysia

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Project notification and consultation requirements are being handled by designated lead agencies under CEQA and NEPA. Please feel free to contact me at 925.357.2562 or via email at ddepietro@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map for the William J. Payne Sports Park Renovation Project



Source: USGS Altamont 7.5' Quadrangle / T3S,R2E,sec2

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map

September 25, 2018

Amah Mutsun Tribal Band of Mission San Juan Bautista
Chairperson Irene Zwierlein
789 Canada Road
Woodside, CA 94062

Subject: Proposed William J. Payne Sports Park Renovation Project

Dear Chairperson Zwierlein:

FirstCarbon Solutions (FCS) is preparing an Initial Study/Mitigated Negative Declaration (ISMND) for the proposed William J. Payne Sports Park Renovation Project on behalf of the Livermore Area Recreation and Park District. As part of the environmental review process, we are conducting a cultural resources assessment.

The Livermore Area Recreation and Park District is proposing to renovate the park to add additional athletic facilities and amenities. The existing William J. Payne Sports Park is a 14-acre park located 5800 Patterson Pass Road in the City of Livermore, Alameda County, California. The semi-triangular park is bounded by a drainage channel and the Union Pacific Railroad tracks (west and north), Vasco Road (east), and Patterson Pass Road (south). The baseball/softball diamonds, multi-purpose field, and BMX course would be removed and replaced with a lighted synthetic turf multi-purpose field, two futsal courts, a multi-purpose natural grass field, a play area, and a shaded picnic area. The parking lot would be reconfigured to provide 285 spaces. Vehicular access would be taken from the same driveway location. A walking loop would be provided around the perimeter of the synthetic turf fields and the multi-purpose natural grass field. Restrooms would be provided near the futsal courts. A pedestrian gateway would be provided at the intersection of S. Vasco Road / Patterson Pass Road. The stormwater basin would remain in the western portion of the site. The park is owned by the City of Livermore and maintained by Livermore Area Recreation and Park District (LARPD).

A Records Search map with a 0.5 mile buffer around the site is enclosed for your reference. The surrounding area is characterized by a mix of residential and commercial uses.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

UNITED STATES

Irvine
250 Commerce, Suite 250
Irvine, CA 92602

Pasadena
16 N. Marengo Avenue, Suite 303
Pasadena, CA 91101

Bay Area
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Central Valley
7265 N First Street, Suite 101
Fresno, CA 93720

Inland Empire
650 E. Hospitality Lane, Suite 125
San Bernardino, CA 92408

Sacramento Valley
2204 Plaza Drive, Suite 210
Rocklin, CA 95765

Connecticut
2 Corporate Drive, Suite 450
Shelton, CT 06484

Utah
2901 Bluegrass Blvd, Suite 200-37
Lehi, UT 84043

EUROPE

United Kingdom
Tel: +44 (0) 845.165.6245
Fax: +44 (0) 20.3070.0890
Jubilee House
Third Avenue
Marlow
United Kingdom SL7 1EY

AUSTRALIA

New South Wales
Tel: +61 (02) 9418.7822
Unit 1, 1 Skyline Place
Frenchs Forest NSW 2086
Australia

AFRICA

Kenya
Tel: +254-737-433-621
ADEC Kenya Services EPZ Ltd.
Nairobi, Kenya

ASIA

Philippines
Tel: +63 (2) 775.0632
Fax: +63 (2) 775.0632 local 8050
26th Floor, Philippine AXA Life Centre,
Sen. Gil Puyat Avenue,
Makati City, Metro Manila

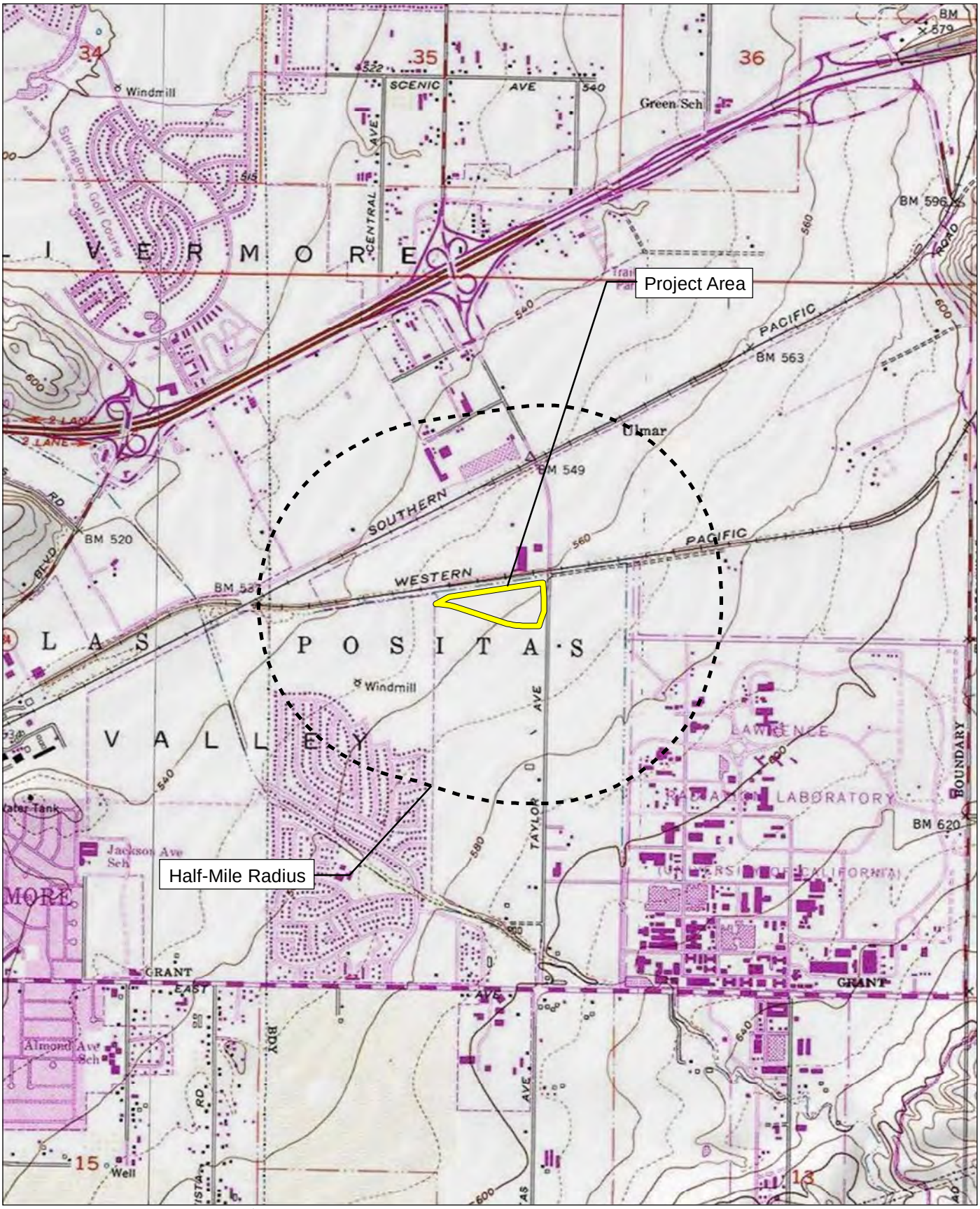
Malaysia
Tel: +603 74902112
Fax: +603 79606977
15-7, Block A, Jaya ONE
72A Jalan Universiti
46200 Petaling Jaya
Selangor, Malaysia

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Project notification and consultation requirements are being handled by designated lead agencies under CEQA and NEPA. Please feel free to contact me at 925.357.2562 or via email at ddepietro@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map for the William J. Payne Sports Park Renovation Project



Source: USGS Altamont 7.5' Quadrangle / T3S,R2E,sec2

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map

C.3 - Site Survey Photographs

THIS PAGE INTENTIONALLY LEFT BLANK

Photograph 1: View of the parking lot area; facing northeast.

Photograph 2: View of the southern recreational field; facing west.

Photograph 3: View of the northeastern baseball diamond; facing southwest.

Photograph 4: View of the northwestern baseball diamond; facing southeast.

Photograph 5: Detail of representative baseball field infrastructure; facing east.

Photograph 6: View of the Park BMX track; facing southeast.

Photograph 7: View of the western water retention basin; facing east.

Photograph 8: View of drainage canal and train tracks immediately north of the project; facing northeast.

Photograph 9: Detail of soil composition within the project location.

THIS PAGE INTENTIONALLY LEFT BLANK

C.4 - UCMP Records Search

THIS PAGE INTENTIONALLY LEFT BLANK

Kenneth L. Finger, Ph.D.
Consulting Paleontologist

18208 Judy St., Castro Valley, CA 94546-2306 510.305.1080 klfpaleo@comcast.net

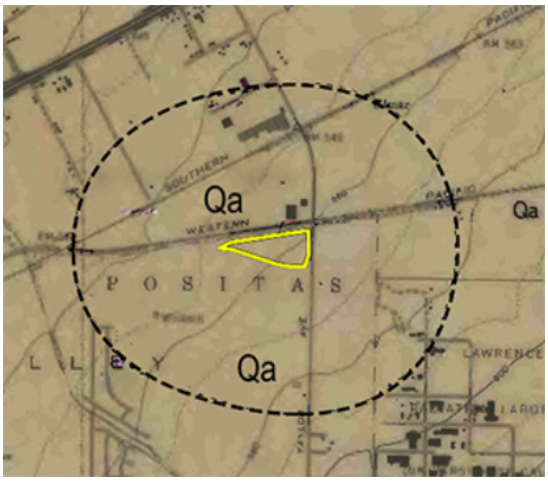
August 20, 2018

Dana DePietro
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Re: Paleontological Records Search: William Payne Park Project (3611.0030), Livermore, Alameda County, California

Dear Dr. DePietro:

As per your request, I have performed a records search on the University of California Museum of Paleontology (UCMP) database for the proposed William Payne Park project site in Livermore. Its PRS locality is Sec. 2, T3S, R2E, Altamont quadrangle (USGS 7.5-series topographic map). Google Earth imagery shows the entire surface of this flat terrain has been heavily disturbed by industrial or commercial development.



Geologic Units

On the part of Dibblee's (1980) geologic map shown here, the project site (yellow outline at center) lies within a large area of Holocene alluvium (Qa) that extends well beyond the half-mile search perimeter (dashed outline). No other units are mapped in the vicinity, suggesting that the surface alluvium here is very thick; hence, it is highly unlikely that Pleistocene deposits will be impacted in the subsurface by project-related excavations.

Records Search

The absence of any potentially fossiliferous unit within the search area precludes performing a records search.

Remarks and Recommendations

Although numerous vertebrate fossils have been recovered from the Livermore area, all of the surficial deposits in the vicinity of the William Payne Park project site are Holocene alluvium. A paleontological walkover survey of the site and paleontological training of the crew prior to construction is not recommended, nor is paleontological monitoring of construction-related earth

disturbing activities. This report therefore satisfies CEQA guidelines and concludes the paleontological mitigation for this project.

In the highly unlikely chance that any significant fossils (i.e., bones, teeth, or unusually abundant and well-preserved invertebrates or plants) are unearthed, construction activities are to be diverted away from the discovery until a professional paleontologist has assessed the find and, if deemed appropriate, salvaged it in a timely manner. Collected fossils should be deposited in an appropriate repository such as the UCMP, where they will be curated and made accessible for future studies.

Sincerely,

Reference Cited

Dibblee, T.W., 1980. Preliminary geologic map of the Altamont quadrangle, Alameda County. U.S. Geological Survey Open-File Report 80-538B, 1:75,000 scale.