

Draft Environmental Impact Report

**Coyote Hills Restoration and
Public Access Project**

CITY OF FREMONT, ALAMEDA COUNTY, CALIFORNIA

East Bay Regional Park District

SCH # 2018062002

March 7, 2019

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1 INTRODUCTION

This Draft Environmental Impact Report (EIR) has been prepared to assess the potential environmental consequences of the proposed Coyote Hills Restoration and Public Access Project (also referred to as “the Proposed Project”) in the northwest corner of the City of Fremont, California, east of Coyote Hills Regional Park and the Don Edwards San Francisco Bay Wildlife Refuge, and north of State Highway Route 84.

This EIR analyzes and describes the potential environmental impacts of the Proposed Project, and identifies mitigation measures and alternatives that would avoid or reduce significant impacts. It also discusses significant unavoidable impacts that cannot be mitigated to a less-than-significant level. It is intended to inform decision makers, other agencies, and the public, of the Proposed Project.

This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA). The East Bay Regional Park District (Park District, or EBRPD) is the lead agency for the Project. There are two responsible agencies with discretionary approval over certain elements of the Project: the City of Fremont and the Alameda County Flood Control and Water Conservation District. The Project will require permits for building, building demolition, reuse of an historic structure, picnic area if group picnic areas are proposed, grading, drainage, and stormwater management issued by the City of Fremont. Other City of Fremont review would include historic architectural review, discretionary design review if group picnic areas are proposed, review of farm stand for special Fremont Municipal Code provisions for Roadside Stands, and tree removal permits if street trees are affected.

The California Department of Fish and Wildlife (CDFW) and the San Francisco Bay Regional Water Quality Control Board (RWQCB) are also considered to be responsible agencies, as they have discretionary authority to authorize regulatory permits, and are granting agencies subject to CEQA review and comment.

The Alameda County Flood Control and Water Conservation District is responsible for implementing the flood control and wetland creation portions of the Project occurring in the Southern Wetlands Natural Unit. The Division of the State Architect and the State Historic Preservation Officer (SHPO) will review the EIR’s findings on historic buildings, and the EIR also will be reviewed by the California Department of Fish and Wildlife, which acts as a Trustee Agency for biological resources.

This EIR is focused on the topics of Biological Resources, Cultural and Tribal Cultural Resources, and Transportation. All other environmental topics are evaluated in detail in an Initial Study in **Appendix A**, and are listed in **Section 1.3** of this document.

The documents incorporated by reference in this EIR are available for public review at Park District headquarters at 2950 Peralta Oaks Court, Oakland, California.

1.1 Proposed Action

The Coyote Hills Restoration and Public Access Project consists of two main actions: 1) approve a Land Use Plan for the 306-acre Park Expansion Area and add the Land Use Unit designations to the 2005 Coyote Hills Regional Park Land Use Plan (LUP) as an Amendment, 2) construct the elements of a Park Development Plan (see **Figures 3-3A** and **3-3B** in Chapter 3, Project Description).

Land Use Plan Amendment Unit Designations

Five Land Use Plan Amendment (LUPA) Unit Designations have been developed that reflect the five differing geographic areas within the Project Area, consistent with the designations used in the 2005 Coyote

Hills Regional Park LUP. Each of these five units has differing attributes and environmental conditions that warrant separate land use designations, management actions, and site development strategies. The Units are used to describe and stipulate proposed land uses, management actions and activities, and physical construction projects that would occur within each individual designation area. These Unit designations are: Natural Units, Recreational Units and a new Agricultural Unit.

The focus of Natural Units is wildlife habitat and native plant community management. Visitor serving facilities such as parking areas, restrooms, and picnic areas would be constructed in Recreation Units. Farming and grazing are the principal designated land uses in Agricultural Units. Grazing is also a permissible use in open grassy areas within Natural Units and Recreation Units. Also included in this designation are areas for repair and storage of farm equipment and machinery, and crop processing and storage, such as hay storage. Also specifically designated in Agricultural Units are farm stands for produce sale. Small trailhead and staging areas, public access trails, wildlife viewing platforms, and interpretive panels and displays are designated uses in both the Natural Units and Recreation Units. There may be sensitive resource areas within all of the units, such as special-status species occurrences or cultural resources. These would be managed separately and special protective measures may be used.

The five units of the Project are:

- Patterson Slough Natural Unit
- Western Wetlands Natural Unit
- Southern Wetlands Natural Unit
- Historic Patterson Ranch Farm Agricultural Unit
- Ranch Road Recreation Unit

Park Development Plan

The proposed Park Development Plan consists of eight elements:

- Habitat Restoration and Enhancement
- Recreation and Visitor-serving Facilities
- Public Access Trail Construction and Operation
- Cultural Resources Management
- Agricultural Land Uses and Associated Activity
- Surface Water and Groundwater Management,
- Utility Upgrades and Extensions
- Climate Change and Sea Level Rise

1.2 Planning Process

Project Background

The site of the proposed Coyote Hills Expansion Project is adjacent to the existing Coyote Hills Regional Park. It consists of lands donated to the Park District by descendants of the Patterson family who originally operated Patterson Ranch.

In 2016, the Park District contracted with a team of consultants lead by Questa Engineering, Inc. to prepare the Coyote Hills Restoration and Public Access Project evaluated in this EIR, which consists of the LUPA and Park Development Plan discussed above.

Adopted Park District goals and policies guided initial planning, formulation of project goals, objectives, scope, and evaluation of opportunities and constraints. Related plans, and applicable laws and regulations were also considered during the project formulation process. Planning for the Coyote Hills Restoration and Public Access Project included a community outreach and public participation process to gather input from the public, stakeholders and interested parties. To date, two public workshops and a CEQA scoping meeting have been held, as well as four public presentations before the Park District Board Executive Committee and full Board of Directors. At the two workshops, approximately 53 members of the public signed in and participated in review of documents, maps, and exhibits analyzing and evaluating site resources, existing conditions, and opportunities/constraints, prior to a review of concepts.

Public input received at these meetings was utilized in the development of the Land Use Plan Amendment and Park Development Plan. A goal of the public participation program, while affording opportunities for different interests to be involved, is to focus review in ways that emphasize the site-specific planning and provide participants the opportunity to understand Project concepts and to comment on issues and concerns to be considered in the Plan and EIR.

The Outreach Program included the following public meetings:

- ◆ Park District Board Executive Committee, July 6, 2017 (Review of Site Constraints and Opportunities)
- ◆ Public Workshop #1, August 14, 2017 (Review of Site Constraints and Opportunities)
- ◆ Park District Board Executive Committee, November 2, 2017 (Review of Draft Program Options)
- ◆ Public Workshop #2, November 13, 2017 (Review of Draft Program Options)
- ◆ Park District Board of Directors, February 20, 2018 (Approval of Conceptual Site Plan and Site Program)
- ◆ CEQA Notice of Preparation Scoping Meeting, May 31, 2018
- ◆ Native American Consultation (AB 52) – April 26, 2018

Additional public meetings will follow as part of the EIR process.

Consultation with Resource Agencies

As the Proposed Project could affect environmental resources including wetland areas, the following agencies were contacted during Project planning: City of Fremont, Fremont Unified School District, Alameda County Mosquito Abatement District, Alameda County Water District, Alameda County Resource Conservation District, California Department of Fish and Wildlife, Eden Landing Wildlife Preserve, Don Edwards Wildlife Refuge, and Alameda County Flood Control and Water Conservation District.

1.3 Environmental Review Process

Initial Study

An Initial Study (IS) checklist was completed for the Proposed Project at the same time this EIR was prepared, and is included in **Appendix A**. The IS included a Project description and a detailed analysis of the following issues:

- ◆ Aesthetics
- ◆ Agriculture and Forest Resources
- ◆ Air Quality
- ◆ Biological Resources
- ◆ Cultural Resources

- ◆ Geology and Soils
- ◆ Greenhouse Gas Emissions
- ◆ Hazards and Hazardous Materials
- ◆ Hydrology and Water Quality
- ◆ Land Use and Planning
- ◆ Mineral Resources
- ◆ Noise
- ◆ Population and Housing
- ◆ Public Services
- ◆ Recreation
- ◆ Transportation
- ◆ Tribal Cultural Resources
- ◆ Utilities and Service Systems

The IS concluded that, with mitigation measures identified in the IS, Project impacts would be reduced to a less-than-significant level in all issues except for:

- ◆ Biological Resources
- ◆ Cultural Resources
- ◆ Tribal Cultural Resources
- ◆ Transportation

Because there could be potentially significant impacts from the Proposed Project for the three issues listed above, an EIR was prepared to evaluate these three issues in more detail.

Notice of Preparation

A Notice of Preparation (NOP) of an EIR was published on May 14, 2018. This announced the date and venue for the public Scoping Meeting. The NOP described the environmental issues to be covered in the EIR and invited comments on the proposed EIR scope. The NOP was sent to the State Clearinghouse, as required under CEQA, and to approximately 200 interested parties. These included: government agencies with a responsibility or interest over the Proposed Project, non-governmental agencies (NGOs), parties requesting to be on the mailing list, and representatives of the Ohlone Tribe. The Park District also posted links to the NOP on its website.

Public Scoping Meeting

A public scoping meeting to describe the EIR process and to solicit comments on issues that should be covered in the EIR was held at the Board Room of the Park District headquarters in Oakland, on May 31, 2018.

Comments Received

Comments were received verbally at the Scoping Meeting and have been summarized for this EIR. Written comments received in the 30-day comment period following publication of the NOP are included, along with the summary of oral Scoping Meeting comments, in **Appendix B** of this EIR.

Draft EIR Availability

A copy of this Draft EIR has been sent to the State Clearinghouse and to those who requested a copy by responding to the NOP. It is also available for downloading from the Park District website at www.ebparks.org. Electronic copies are also available at the Fremont Main Library, 2400 Stevenson Boulevard, Fremont; and at the Centerville Library, 3801 Nicolet Avenue, Fremont.

Draft EIR Comments

This Draft EIR was published on March 7, 2019, which marks the start of the 45-day comment period as required under CEQA. Written comments should be received no later than 5 p.m. on April 22, 2019 and should be sent to:

Karla Cuero
East Bay Regional Park District
Acquisition Stewardship and Development Division
2950 Peralta Oaks Court
PO Box 5381
Oakland, CA 94605
Comments can also be sent via email to kcuro@ebparks.org.

Comments should focus on the environmental impacts and the adequacy of the EIR. Section 15151 of the State *CEQA Guidelines* defines the standards for EIR adequacy as follows:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a Proposed Project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR would summarize the main points of disagreement among the experts. The courts have looked not for perfection; but for adequacy, completeness, and a good faith effort at full disclosure.

Final EIR and Responses to Comments

All comments received within the comment period and pertaining to the environmental impacts and adequacy of the Draft EIR will be responded to in writing. CEQA does not require responses to comments on the project merits, or unsubstantiated comments. Responses, together with comment letters and emails, will be included in the Final EIR, along with any necessary revisions to the contents of the Draft EIR.

Final EIR Approval and Project Approval

The Final EIR will be made publicly available in the same manner as the Draft EIR. After publication of the Final EIR, the Park District Board of Directors will consider whether to certify the Final EIR, adopt findings, and approve the Project, after evaluating its merit.

The Park District meeting for EIR certification and Project approval will be a public hearing where additional comments may be received.

1.4 Report Organization

This EIR is organized into the following chapters:

- ◆ **Chapter 1, Introduction.** Chapter 1 provides background and an overview of this EIR document.

- ◆ **Chapter 2, Report Summary.** Chapter 2 is a synopsis of the Project description, required permits, environmental impacts of the Proposed Project, alternatives, and CEQA conclusions.
- ◆ **Chapter 3, Project Description.** Chapter 3 describes the Proposed Project.
- ◆ **Chapter 4, Environmental Evaluation.** Chapter 4 evaluates the potential environmental impacts of the Proposed Project.
- ◆ **Chapter 5, Alternatives.** Chapter 5 considers the No Project Alternative and three other Project alternatives, and identifies the “Environmentally Superior Alternative.”
- ◆ **Chapter 6, CEQA-Required Assessment Conclusions.** Chapter 6 evaluates effects with regard to growth inducement, significant irreversible changes, cumulative impacts, and impacts found not to be significant.
- ◆ **Chapter 7, Report Preparers.** Identifies the preparers of the EIR.
- ◆ **Appendices.** Includes the Initial Study and other relevant background materials.

2 REPORT SUMMARY

This summary presents an overview of the analysis contained in this EIR. The chapter summarizes the following: 1) the Project under review, 2) areas of controversy, 3) significant impacts and mitigation measures, 4) unavoidable significant impacts, and 5) alternatives to the Project. Additional detail on the Proposed Project is provided in Chapter 3. Additional detail on the environmental impacts is provided in Chapter 4 and **Appendix A: Initial Study**. Alternatives are described and evaluated in Chapter 5.

2.1 *Project Under Review*

Location and Setting

The 306-acre Coyote Hills Restoration and Public Access Project area is the subject of the proposed restoration and public access Project. It is located in the northwest corner of the City of Fremont, east of the Don Edwards San Francisco Bay Wildlife Refuge, and north of State Highway Route 84. The Expansion area borders on the east side of the existing Coyote Hills Regional Park; is bounded to the east by Ardenwood Boulevard and Paseo Padre Parkway; and is bounded to the north by the Alameda Creek Flood Control Channel (see **Figures 3-1 and 3-2**).

Project Characteristics

The Proposed Project consists of two main components, a Land Use Plan Amendment (LUPA) and a Park Development Plan, both prepared by the East Bay Regional Park District (Park District). The LUPA amends the 2005 Coyote Hills Regional Land Use Plan to include the 306-acre Park expansion and its land uses. The Park Development Plan outlines the restoration and development of the Expansion area proposed in this Project.

The proposed Park Development Plan has eight main elements (**Figures 3-2, 3-3A, and 3-3B**):

- 1) Habitat Restoration and Enhancement
- 2) Recreation and Visitor Serving Facilities
- 3) Public Access Trail Construction and Operation
- 4) Cultural Resources Management
- 5) Agricultural Land Uses and Associated Activity
- 6) Surface Water and Groundwater Management
- 7) Utility Upgrades and Extensions
- 8) Climate Change and Sea Level Rise

Required Permits and Approvals

As a California Special District, the Park District governs use and development of its park lands pursuant to Section 5541, 5558, 5559, 5560, and 5565 of the Public Resources Code of the State of California. Rules and park use regulations are codified in Park District Ordinance 38. It is estimated that permits and/or approvals could be required from up to twelve separate agencies. These are:

Federal Agencies

- ◆ U.S. Army Corps of Engineers – Permits for any earthwork in jurisdictional wetland areas or over Waters of the U.S.
- ◆ U.S. Fish & Wildlife Service and National Marine Fisheries Service – The Corps of Engineers may initiate consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service in accordance with Section 7 of the Endangered Species Act, for activities in wetlands/waters occupied by listed or protected species.

State Agencies

- ◆ Department of Fish and Wildlife – Section 1600 Stream or Lakebed Alteration Agreement. Coordination and consultation may also be required for potential Project impacts on or within habitat areas occupied by protected or listed species covered under the California Endangered Species Act.
- ◆ San Francisco Bay Regional Water Quality Control Board (RWQCB) – The Project may require Water Quality Certification under Section 401 of the Clean Water Act, Notice of Intent (NOI) for construction activity, and Waste Discharge Requirements (WDRs) if any wetlands or state and federal waters are impacted.

Regional Agencies

- ◆ Bay Area Air Quality Management District - Permit for construction work involving use of heavy equipment.

County and Local Agencies

- ◆ City of Fremont – Implementation of elements of the park development plan may require: Conditional Use Permit (CUP) and discretionary design review, as needed for establishing a group picnic facility, Discretionary Design Review Permit for proposed site improvements, Historic Architectural Review for dismantling and removal of the Labor Contractors Residence and substantial revisions to the historic Arden Dairy Milk House, review of farm stand for special Fremont Municipal Code provisions for Roadside Stands, grading permit, stormwater management and drainage permit, building permits, including CALGreen compliance, tree removal permits if street trees are affected, review by the City Engineering Department and approval by the City’s Floodplain Manager in the Engineering Department of any bridges over FEMA regulatory flood plains, and approval of Project Plans, Encroachment Permits and other construction agreements for improvements to or within the Patterson Ranch Road-Paseo Padre Parkway intersection and public road improvements.
- ◆ Alameda County Flood Control and Water Conservation District -- Review and agreement for Project Engineering Plans for all trails and structures on ACFCWCD lands.
- ◆ Alameda County Water District -- Coordination, permit applications and approval for destruction of abandoned wells, construction of any new well and/or repair of an existing well, deep piers for bridges and boardwalk structures or wildlife observation platforms, and extension of a domestic waterline from Paseo Padre Parkway.
- ◆ Alameda County Transit District -- Coordination with the Alameda County Transit District regarding transit routes in the Project vicinity, and/or adding a new bus stop/bus shelter along Paseo Padre Parkway and near the Park entry.
- ◆ Alameda County Environmental Health -- Permitting and coordination for abandonment and closure of any septic tank and leach fields associated with historic agricultural buildings.
- ◆ Union Sanitary District (USD) -- Annexation to the USD, permits for connection of park staging area restroom to the sanitary sewer main, specific approval for construction over USD force mains, and an Encroachment Permit for construction roads.

2.2 *Areas of Controversy*

The Proposed Project raises the following areas of potential controversy: historic architectural resources, archaeological resources including potential for buried Native American remains, preservation and protection of biological resources, access to the site for mosquito abatement, and alternative locations for trails and parking.

2.3 *Significant Impacts and Mitigation Measures*

Significant Impacts and Mitigation Measures are summarized in **Table 2-1**. This table contains all mitigation measures applicable to the Proposed Project, which include both mitigation measures identified in this EIR (for Biological Resources, Cultural and Tribal Cultural Resources, and Transportation), and mitigation measures identified in the Initial Study (all other mitigation measures). The Initial Study is included as **Appendix A**.

TABLE 2-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
AESTHETICS			
<i>The Project would not result in significant Project or cumulative impacts related to Aesthetics; therefore, no mitigation measures are required.</i>			
AGRICULTURE AND FOREST RESOURCES			
<i>The Project would not result in significant Project or cumulative impacts related to Agriculture and Forest Resources; therefore, no mitigation measures are required.</i>			
AIR QUALITY			
Impact AIR -1:	PS	<p><u>Mitigation Measure AIR -1:</u> The following Best Management Practices (BMPs) shall be included in the Project construction dust/emission control plan with a designated contact person for on-site implementation:</p> <ol style="list-style-type: none"> 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 3. 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. 4. All vehicle speeds on unpaved roads shall be limited to 15 mph. 5. 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. 6. A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Park District's phone number shall also be visible to ensure compliance with applicable regulations. 	LTS

* Key: PS = potentially significant, LTS = less than significant, SU = significant and unavoidable

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
<p><u>BIOLOGICAL RESOURCES</u></p> <p>Impact BIO-1: The Project could have a substantial adverse effect, either directly or through habitat modifications and disturbance, on species identified as a candidate, sensitive, or Special Status species in local or regional plans policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.</p>	<p>PS</p>	<p><u>Mitigation Measure BIO-1a, Project-wide: General Conservation Measures to Protect Habitat for All Special Status Wildlife Species:</u> The Park District and its Construction Contractors will implement measures to avoid and minimize potential adverse effects on Special Status wildlife species. Prior to conducting work and during work in sensitive biological communities and Special Status species habitats, including work within 100 feet of Patterson Slough, and within or near jurisdictional wetlands, the following measures will be implemented.</p> <ul style="list-style-type: none"> • A qualified, U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW) approved Biological Monitor (Qualified Biologist) shall be present to observe work and shall have the authority to halt work as necessary if permit conditions are being violated. • Pre-construction biological surveys appropriate to Special Status wildlife species will be conducted by the Qualified Biologist prior to initiation of construction. • Before any construction activities begin on the Project, the Qualified Biologist shall conduct a training session for construction workers, and Park personnel involved in construction of the Project. The training shall include a description of each Special Status species that might occur and their respective habitats, including wetlands, the general measures that are being implemented to protect each of the species as they relate to the Project, and the physical boundaries within which the Project shall be accomplished. The training should also provide instruction in the appropriate protocol to follow in the event that a Special Status species is found onsite, including contact telephone numbers. • Before starting ground disturbing activities within construction areas, the Park District and its Construction Contractors shall clearly delineate the boundaries of the construction area with 	<p>LTS</p>

* Key: PS = potentially significant, LTS = less than significant, SU = significant and unavoidable

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		<p>fencing, stakes, or flags. Contractors shall be required to restrict construction-related activities to within the fenced, staked, or flagged areas. Contractors shall maintain fencing, stakes, and flags until the completion of construction-related activities in that area. Fencing stakes and flags shall be removed upon completion of construction work. Sensitive habitat areas, including Special Status wildlife species habitat and known populations, and jurisdictional wetlands, shall be clearly indicated on the Project construction plans.</p> <ul style="list-style-type: none"> • To prevent Special Status wildlife species from moving through the construction area, the Park District or its Construction Contractors shall install temporary wildlife exclusion fencing. Final fence design, including appropriate animal escape structures within the fencing and fence location, shall comply with permit conditions, as appropriate for each species being protected. Any construction-related disturbance outside of these boundaries, including parking, temporary access, construction staging, or areas used for storage of materials, shall be prohibited without approval of the Qualified Biologist. New trails, bridges, or other structures shall not extend beyond the delineated construction work area boundary. Construction vehicles shall pass and turn around only within the delineated construction work area boundary or existing local road network. Where new access is required outside of existing roads or the construction work area, the route shall be clearly marked (i.e., flagged and/or staked) prior to being used, subject to review and approval of the Qualified Biologist. • Where wildlife exclusion fencing is not installed and ground disturbing activity is occurring, the Qualified Biologist will approve the proposed disturbance in advance and clear the area prior to the start of ground disturbing activity. • A USFWS-approved and/or CDFW-approved Biological Monitor should be on-site during installation of the fencing to 	

* Key: PS = potentially significant, LTS = less than significant, SU = significant and unavoidable

Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		<p>any Special Status wildlife outside the construction area. The fencing shall be inspected by the qualified Biological Monitor on a daily basis during construction activities to ensure fence integrity. Any needed repairs to the fence shall be performed on the day of their discovery. After construction has been completed, the exclusion fencing shall be removed within 72 hours.</p> <ul style="list-style-type: none"> • Immediately prior to conducting vegetation removal or grading activities inside fenced exclusion areas, the Qualified Biologist or a qualified biologist working under their direction shall survey within the exclusion area to ensure that no Special Status species are present. The Qualified Biologist or a qualified biologist working under their direction shall also monitor vegetation removal or grading activities inside fenced exclusion areas for the presence of Special Status species. • Excavated soils shall be stockpiled in disturbed areas lacking native vegetation, and/or as shown on the Construction Plans, or approved by the Qualified Biologist. • All detected erosion caused by Project-related impacts (i.e., grading or clearing for new trails) and other improvements shall be remedied immediately upon discovery. • The introduction of exotic plant species shall be avoided first through prevention, followed by physical or chemical methods. Construction equipment shall arrive at the Project area free of soil, seed, and vegetative debris to reduce the likelihood of introducing new weed species. Weed-free rice straw or other certified weed free straw shall be used for erosion control. Earth-moving equipment, gravel, fill, or other materials will be weed-free. Mechanical seeding equipment shall be inspected for residual seeds and cleaned prior to use onsite. Construction operators will ensure that clothing, footwear, and equipment used during construction is free of soil, seeds, vegetative matter 	

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		<p>or other debris or seed-bearing material before entering the Park or from an area with known infestations of invasive plants and noxious weeds. Weed populations introduced into the site during construction shall be eliminated by chemical and/or mechanical means approved by the Qualified Biologist.</p> <ul style="list-style-type: none"> • Use of herbicides as vegetation control measures shall be used in compliance with the Park District’s IPM policies and Best Management Practices (BMPs). All uses of such herbicidal compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and state and federal legislation, as well as additional Project-related restrictions deemed necessary by the CDFW and/or USFWS, and included in the permit conditions. No rodenticides shall be used. • The introduction of soil-borne pathogens shall be avoided by following the Park District’s Pathogen Controls Best Management Practices. • If Special Status wildlife species are found within or near construction areas during Project construction work, construction activities shall cease in the vicinity of the animal until the animal moves on its own outside of the Project area (if possible). The wildlife resource agency(ies) with jurisdiction over the species shall be contacted regarding any additional avoidance, minimization, or mitigation measures that may be necessary if the animal does not move on its own. The daily monitoring report prepared by the Qualified Biologist shall document the activities of the animal within the site; fence construction, modification, and repair efforts; and movements of the animal once again outside the exclusion fence. This report shall be submitted to the Park District and the appropriate regulatory agency with jurisdiction over the wildlife species. 	

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		<ul style="list-style-type: none"> • Uncommon or previously undocumented Special Status wildlife species observed during surveys will be reported to the USFWS and CDFW so observations can be added to the California Natural Diversity Database (CNDDDB). • Before steep-walled holes or trenches are back filled, they shall be inspected for trapped animals. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If listed species are trapped, the USFWS and/or CDFW, as appropriate, shall be contacted to determine the appropriate method for relocation. • Construction pipes, culverts, or other structures that are stored at a construction site for one or more overnight periods and with a diameter of 4 inches or more shall be inspected for Special Status species before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a Special Status species is discovered inside a pipe, and does not move of its own accord, that section of pipe shall not be moved until the appropriate resource agency, with jurisdiction over that species, has been consulted to determine the appropriate method for relocation. If necessary, under the direct supervision of the Qualified Biologist, the pipe may be moved once to remove it from the path of construction activity until the animal has escaped. • Vehicles and equipment shall be in proper working condition to ensure that there is no potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Contractor equipment shall be checked for leaks daily prior to operation and repaired when leaks are detected. Fuel containers shall be stored within appropriately sized secondary containment barriers. The Qualified Biologist shall be informed of any hazardous spills within 24 hours of the incident. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be properly disposed of at an 	

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		<p>appropriate facility. If vehicle or equipment maintenance is necessary, it may be performed in the designated staging areas, as shown on the Construction Plans or approved by the Qualified Biologist.</p> <ul style="list-style-type: none"> • Temporarily disturbed areas shall be returned to pre-project conditions or better. • Project-related vehicles should observe a 15-mile-per-hour speed limit on unpaved access roads within the limits of construction. • Documentation of compliance, as required by any regulatory permit conditions, with applicable state and federal laws pertaining to the protection of Special Status wildlife and native and migratory birds and raptors shall be recorded in a daily monitoring report and made available to the CDFW as part of a post construction biological monitoring report. <p><u>Mitigation Measure BIO-1b, Project-wide: Prepare and Implement a Habitat Mitigation and Monitoring Plan (HMMP) for Temporary or Permanent Impacts to the Habitat of Special Status Species and Jurisdictional Wetlands:</u> The Park District shall implement the following mitigation measure to restore or compensate for habitat, including Special Status habitat and jurisdictional wetland areas disturbed or impacted by Project actions.</p> <ul style="list-style-type: none"> • To restore any temporarily or permanently impacted habitat for Special Status species or for jurisdictional wetland areas, the Park District shall prepare and implement a Habitat Mitigation and Monitoring Plan (HMMP), as required by regulatory permit conditions. The HMMP shall detail the specifications for minimizing the introduction of invasive weeds, restoring disturbed areas, and shall identify parties responsible for implementing the Plan. The Plan shall include by proportionate amounts, specific habitat suitable for Special Status species and sensitive plant communities that are impacted (e.g., mixed 	

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		<p>riparian, willow sausal, seasonal wetlands, etc).</p> <ul style="list-style-type: none"> To facilitate preparation of the Plan, the Park District shall, prior to construction, have a botanist or landscape architect (experienced in identifying native plant species in the Project area) perform additional preconstruction surveys of the areas as needed to document baseline vegetation composition, species occurrence, vegetation characterization (tree diameter size, etc.), and percent cover of plant species. <p><u>Mitigation Measure BIO-1c, Project-wide: Avoidance, Minimization, and Compensation for Impacts to Special Status Plant Species:</u> The Park District and its Construction Contractors will implement measures to avoid and minimize potential adverse effects on Special Status plants. Prior to conducting work and during work in areas with potential for occurrence of Special Status plants, the following measures will be implemented.</p> <ul style="list-style-type: none"> A botanical survey of the action area (construction disturbance area) will be completed by a Qualified Botanist using the US Fish and Wildlife Service's Guidelines for <i>Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants</i> (USFWS, 2000) and CDFW <i>Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities</i> (CDFG, 2000). The Qualified Botanist shall be approved by USFWS or CDFW, as required by permit conditions. Surveys shall, be floristic in nature, include areas of potential indirect impacts, be conducted in the field at the time of year when species are both evident and identifiable, and be replicable. The purpose of these surveys will be to identify the locations of Special Status plants. The extent of mitigation needed for the direct loss of or indirect impacts on Special Status plants will be based on these survey results. and consultation with CDFW Locations of Special Status plants in proposed construction 	

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		<p>areas will be recorded by the qualified Botanist using a global positioning system (GPS) unit, and flagged in the field. The GPS data will be used to create digital and hardcopy maps for distribution to construction inspectors and contractors to inform them of areas where disturbance is prohibited, or where activities are restricted.</p> <ul style="list-style-type: none"> • If initial screening by the Qualified Botanist identifies the potential for Special Status plant species to be directly or indirectly affected by a specific construction activity, the Qualified Botanist will establish an adequate buffer area to exclude activities that would directly remove or alter the habitat of an identified Special Status plant population, or result in indirect adverse effects of the species. • Access may be restricted around Special Status plant populations through appropriate field direction by the Qualified Botanist. This may include signage, buffers, seasonal restrictions, and design or no access, depending on the Special Status species in question. • The Park District and its Construction Contractors shall install a temporary, plastic mesh-type construction fence (Tensor Polygrid or equivalent) at least 4 feet (1.2 meters) tall around any Qualified Botanist-required buffer areas to prevent encroachment by construction equipment and personnel. The Qualified Botanist will determine the exact location of the fencing. The fencing will be strung tightly on posts set at maximum intervals of 10 feet (3 meters), and will be checked and maintained weekly until all construction is complete in the area where Special Status plant species occur. • No grading, clearing, storage of equipment or machinery, or other disturbance or construction activity will occur until all temporary construction fencing has been installed by the Park District, and its Construction Contractor, and inspected and 	

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		<p>approved by the Qualified Botanist.</p> <ul style="list-style-type: none"> • Special Status plant species observed during surveys will be reported to the USFWS and CDFW so observations can be added to the California Natural Diversity Database (CNDDDB). • If avoidance of Special Status populations is not feasible, rare plants and/or their seeds shall be collected, salvaged and relocated, and habitat restoration shall be provided to replace any destroyed Special Status plant occurrences at a minimum 1:1 ratio based on the area of lost habitat (accurately field measured). Compensation for loss of Special Status plant populations may include the restoration or enhancement of temporarily impacted areas, and management of restored areas. Restoration or reintroduction may be located on-site (i.e., within the project footprint or local vicinity) or at a nearby suitable off-site area within Coyote Hills Regional Park with suitable soil and hydrologic conditions for that species. At a minimum, the Special Status plant mitigation areas shall meet the following performance standards by the fifth year after mitigation planting/seeding, as determined by monitoring, as follows. <ul style="list-style-type: none"> ▪ The compensation area shall be at least the same size as the impact area. ▪ Invasive species cover shall be less than or equal to the invasive species cover in the impact area. ▪ Restored populations shall have at least the same number of individuals of the impacted population, in an area greater than or equal to the size of the impacted population, for at least three (3) consecutive years. ▪ The final Special Status plant impact compensation, plant establishment, and monitoring methods will be determined in consultation with CDFW and will be included in the project Habitat Mitigation and Monitoring Plan (HMMP) 	

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		see BIO-1b.	
		<p><u>Mitigation Measure BIO-1d, Species-Specific: Conservation Measures to Protect Special Status Birds, Migratory Birds, and Raptors:</u></p> <ul style="list-style-type: none"> • If ground disturbance activities or impacts occur during the breeding season (approximately February 1 through August 31), pre-construction nesting migratory birds, raptors and other Special Status bird species surveys shall be conducted by a Qualified Biologist. Such surveys shall include but not be limited to the following: salt marsh common yellowthroat, Alameda song sparrow, loggerhead shrike, short-eared owl, white-tailed kite, northern harrier, and other nesting birds protected by the Migratory Bird Act, or by their status as a protected species or Species of Special Concern. • The pre-construction surveys shall occur within 14 days prior to the ground disturbance and vegetation removal activities. Surveys should be conducted within suitable nesting habitat within 200 feet of the area to be disturbed. • If the survey does not identify any nesting migratory birds, raptors and other Special Status bird species in the areas potentially affected by the proposed activity, no further action is required. If nesting migratory birds, raptors and other Special Status bird species are found to occur that might be impacted by Project activities, a “no disturbance buffer” will be established around the habitat area. The Qualified Biologist will consult with CDFW to determine the size of the no-disturbance buffer, which will be marked off with temporary orange construction fencing. This buffer may vary depending on habitat characteristics and the species. 	
		<p><u>Mitigation Measure BIO-1e, Species-Specific: Conservation</u></p>	

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		<p><u>Measures to Protect Habitat for Salt Marsh Harvest Mouse:</u> Additional project-specific avoidance and minimization measures for salt marsh harvest mouse (SMHM) in areas within 200 feet of suitable habitat, such as saline seasonal wetlands near Patterson Ranch Road (pickleweed dominated areas) would be implemented during proposed work along Patterson Ranch Road and the Tuibun Trail. These measures would be consistent with those required by USFWS and CDFW, and as specified in any permit conditions. They are likely to include the following:</p> <ul style="list-style-type: none"> • Removal of vegetation where needed in areas near suitable habitat under the supervision of an agency-approved Qualified Biologist using approved methods. • Upon verifying work zones are mouse free by a Qualified Biologist, Install species-appropriate Environmentally Sensitive Area (ESA) wildlife exclusion fencing prior to initiation of construction in potential mouse habitat areas. Exclusion fencing for Salt Marsh Harvest Mouse shall be designed with agency approved doors to allow escape of trapped mice and have a “no climb” design to ensure mice do not climb over the fence once installed. • Check in, under and around equipment and material stockpiles for Special Status wildlife on a daily basis each morning, prior to initiation of work. <p><u>Mitigation Measure BIO-1f, Species-Specific: Conservation Measures to Protect Habitat for California Black Rail during Breeding Season:</u></p> <ul style="list-style-type: none"> • Project specific avoidance and minimization measures for California black rail in areas within 200 feet of suitable habitat, such as saline seasonal wetlands, would be implemented during proposed work along Patterson Ranch Road and the Tuibun Trail, consistent with those required by the USFWS and CDFW as specified in any permit conditions. 	

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		<ul style="list-style-type: none"> • Protocol level surveys would be conducted in suitable habitat for California black rail that are within 200 feet of Project “Limits of Work” or as directed in any agency permit conditions. Surveys will be completed prior to initiation of construction each year of proposed construction activity that may potentially impact black rails. • Protocol surveys would be conducted around dawn and/or dusk between February and March when black rails are most likely to vocalize during their breeding season. • If active nests are found, the Park District will consult with CDFW to determine appropriate setbacks, buffers, and work windows. <p><u>Mitigation Measure BIO-1g, Species-Specific: Conservation Measures to Protect Habitat for Burrowing Owl:</u></p> <ul style="list-style-type: none"> • Burrowing owl surveys will be completed by a CDFW-approved Qualified Biologist for those portions of the Project area that have suitable habitat for this species and that could potentially be disturbed by construction activities. The surveys shall follow burrowing owl survey protocols establish by CDFW and may require multiple site visits with the final survey completed no more than 14 days prior to initiation of construction activities • Should nesting or resident burrowing owls be found to occur within the Project construction area, and their occupied habitat cannot be preserved and protected as noted above, then suitable new burrowing owl habitat shall be created and managed as a part of implementation of the Habitat Mitigation and Monitoring Plan (HMMP) (see Mitigation Measure BIO-1b), following CDFW guidance and protocols. <p><u>Mitigation Measure BIO-1h, Species-Specific: Conservation</u></p>	

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		<p><u>Measures to Protect Western Pond Turtle:</u> A qualified Biologist approved by the CDFW shall conduct a preconstruction biological survey for Western Pond Turtle (WPT). The survey area shall include those portions of Crandall Creek (Line-K), Ardenwood Creek (Line-P), DUST Marsh, and Patterson Slough where construction disturbance could occur, or within 500 feet of all such construction activity. The surveys shall be conducted 48 hours prior to initial construction disturbance. Any identified WPT shall be relocated, by a qualified biologist, to a suitable location approved by CDFW and outside of the Project's construction disturbance boundaries.</p> <p><u>Mitigation Measure BIO-1i: Species-Specific: Conservation Measures to Protect Habitat for Bats</u> (along with Implementation of the City of Fremont's Standard Development Plan): In advance of tree removal and dismantling of the Contractors residence, a preconstruction survey for Special Status bats shall be conducted by a Qualified Biologist to characterize potential bat habitat and identify active roost sites within the Project site. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, the following measures shall be implemented:</p> <ul style="list-style-type: none"> • Removal of trees and structures shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, outside of bat maternity roosting season (approximately April 15 – August 31), and outside of months of winter torpor (approximately October 15 – February 28), to the extent feasible. • If removal of trees and structures during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the Project site where tree and structure removal is planned, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to 	

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		<p>be no longer active by the Qualified Biologist.</p> <ul style="list-style-type: none"> • The Qualified Biologist shall be present during tree and structure removal if active bat roosts, which are not being used for maternity or hibernation purposes, are present. Trees and structures with active roosts shall be removed only when no rain is occurring or is forecast to occur for three days and when daytime temperatures are at least 50°F. • Removal of trees with active or potentially active roost sites shall follow a two-step removal process: <ul style="list-style-type: none"> ▪ On the first day of tree removal and under supervision of the Qualified Biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws. ▪ On the following day and under the supervision of the Qualified Biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe). ▪ Removal of structures containing or suspected to contain active bat roosts, which are not being used for maternity or hibernation purposes, shall be dismantled under the supervision of the Qualified Biologist in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to roost. 	

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<p>Impact BIO-2: Riparian Areas</p> <p>The Project could have a substantial adverse impact on riparian habitat and other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife Services.</p>	PS	<p><u>Mitigation Measure BIO-2a, Project-wide: Minimize Disturbance to Riparian Habitat:</u> For work occurring immediately adjacent to riparian habitat, including willow thickets and adjacent areas of oak woodland, riparian areas shall be clearly delineated with flagging by a Qualified Biologist. Riparian areas shall be separated and protected from the work area through silt fencing, amphibian friendly fiber rolls (i.e., no monofilament), or other appropriate erosion control material. Material staging, trails and all other Project-related activity shall be located as far possible from riparian areas. If riparian areas cannot be entirely avoided by construction activities, any temporarily impacted areas shall be restored to pre-construction conditions or better at the end of construction (see below Mitigation Measure BIO-2b).</p> <p><u>Mitigation Measure BIO-2b, Project-wide: Habitat Mitigation and Monitoring to Mitigate for Temporary Impacts to Riparian Habitat:</u> If temporary disturbance to riparian habitat within the Project area cannot be avoided, the HMMP discussed in Mitigation Measure BIO-1b, shall be implemented for riparian habitats temporarily impacted by construction activities. The Plan shall outline measures to restore, enhance, improve or re-establish riparian habitats on site.</p>	LTS
<p>Impact BIO-3: Wetlands</p> <p>This Project could 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, as well as to Waters of the State of California.</p>	PS	<p><u>Mitigation Measure BIO-3a, Project-wide: Avoid and Minimize Impacts to Wetlands and Waters of the U.S. and of the State:</u></p> <ul style="list-style-type: none"> • The Project jurisdictional wetland delineation shall be confirmed in coordination with the US Army Corps of Engineers (USACE) and CDFW to determine the extent of Waters of the U.S. and Waters of the State within the Project area to ensure construction footprints and associated construction disturbance areas do not encroach into wetlands. • The Project shall be designed to avoid and/or minimize direct impacts on wetlands and/or waters under the jurisdiction of the USACE, RWQCB, and CDFW to the extent feasible. 	LTS

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		<p><u>Mitigation Measure BIO-3b, Project-wide: Habitat Mitigation and Monitoring to Mitigate for Temporary Impacts to Wetlands and Waters of the U.S. and of the State:</u> If temporary disturbance or permanent loss of wetlands cannot be avoided, the HMMP (see Mitigation Measure BIO-1b) shall be implemented for wetlands or waters of the U.S. or of the State impacted by construction activities. The HMMP shall outline measures to restore, improve, or re-establish wetland habitat within Coyote Hills Regional Park to ensure compensatory mitigation requirements for wetland impacts are satisfied.</p>	
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CULTURAL AND TRIBAL CULTURAL RESOURCES			
Impact CUL-1: Project construction could disturb the Arden Dairy Milk House on the site, a historic building.	PS	<p><u>Mitigation Measure CUL – 1a:</u> The Park District shall retain the Arden Dairy Milk House in its current location to maintain integrity of location. Annual inspections by Park District maintenance staff shall be conducted each year to assess the building’s interior and exterior condition, including weather tightness and vandal resistance. Following inspection, repairs and maintenance shall be conducted as necessary in a timely fashion. Repairs and maintenance activities and prioritization shall be guided by the Secretary of the Interior's <i>Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings</i> or the Secretary of the Interior's <i>Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings</i> (1995).</p> <p><u>Mitigation Measure CUL – 1b:</u> If the Arden Dairy Milk House is restored and/or adaptively reused, restoration and adaptive reuse shall be conducted to the extent feasible, in accordance with the Secretary of the Interior's <i>Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings</i> or the Secretary of the Interior's <i>Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings</i> (1995). A historic architect meeting the Secretary of the Interior’s Professional Qualifications Standards shall prepare the treatment plans. New construction within 30 feet of the building shall be consistent with its historic character, to the extent feasible. Exterior modifications to the Arden Dairy Milk House shall be subject to Historic Architectural Review by the City of Fremont.</p>	LTS
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Impact CUL-2: Dismantling and removal of the Patterson Ranch Labor Contractors Residence would disturb this historic building on the Project site.	PS	<p><u>Mitigation Measure CUL-2a:</u> The Park District shall document the Contractors Residence prior to disassembly or demolition activities. This documentation shall be performed by a Secretary of Interior-qualified professional (in history or architectural history) using professional standards such as the National Parks Service (NPS) Historic American Building Survey (HABS)/Historic American Landscape Survey (HALS) Level I report, or as required by the City of Fremont Historic Architectural Review Board.</p> <p><u>Mitigation Measure CUL-2b:</u> In concert with Mitigation Measure CUL-2a, the Park District shall install an interpretive display or signage for public exhibition concerning the history of the historical resource at the site or provided to local historical societies and libraries.</p>	SU
Impact CUL-3: Excavation and earth moving activities for the Proposed Project could have an adverse impact on the two unrecorded midden exposures, and the “shell midden” deposit present at two locations within the Project site. These middens may contain human remains, as well as currently undiscovered Native American cultural objects and human remains.	PS	<p><u>Mitigation Measure CUL-3a:</u> In order to mitigate potential adverse impacts to Native American cultural objects discovered during construction, work shall be halted within 100 feet of the discovery until the objects have been inspected and evaluated by a qualified Archaeologist meeting the Standards of the Secretary of the Interior. The Archaeologist shall, in accordance with <i>EBRPD Guidelines for Protecting Parkland Archaeological Sites</i>¹, identify and evaluate the significance of the discovery and develop recommendations for treatment to ensure any impacts to the cultural resource are less than significant. The preferred mitigation is avoidance. If avoidance is not feasible, Project impacts shall be mitigated in accordance with the recommendations of the evaluating Archaeologist in consultation with the East Bay Regional Park District, as Lead Agency, and CEQA Guidelines §15126.4 (b)(3)(C). Such mitigation may include additional archaeological testing, archaeological monitoring and/or an archaeological data recovery program. A Native American monitor shall be retained to monitor the ground disturbance when it is suspected that prehistoric human remains might be encountered.</p> <p><u>Mitigation Measure CUL-3b:</u> If Native American human remains are discovered during construction, implement Mitigation Measure CUL-5.</p>	LTS
Impact CUL-4: Excavation, earth moving, and trenching for utilities during construction of the	PS	<p><u>Mitigation Measure CUL-4:</u> The Park District shall be notified if fossils and possible unique geological features are uncovered during construction of the Proposed Project. Work shall halt within 50 feet of the find until the situation can be assessed by a</p>	LTS

¹ East Bay Regional Park District, 1989. Oakland, California.

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Proposed Project could impact fossil containing rock units.		qualified Geologist or Paleontologist. The Geologist or Paleontologist shall identify and evaluate the significance of the discovery and develop recommendations for treatment to ensure any impacts to the cultural resource are less than significant. Mitigation may include avoidance of the resource; preparation of a treatment plan that could require recordation, collection, and analysis of the discovery; or curation of the collection and supporting documentation in an appropriate depository. All feasible recommendations of the Geologist or Paleontologist shall be implemented.	
Impact CUL-5: Excavation, earth moving, and trenching for utilities during construction of the Proposed Project could have an adverse impact on currently undiscovered human remains.	PS	<u>Mitigation Measure CUL-5:</u> In order to mitigate potential adverse impacts to human remains discovered during construction, work shall be halted within 100 feet of the discovery until the materials or features have been inspected and evaluated by a qualified Archaeologist who meets the Standards of the Secretary of the Interior. The Park District and/or its contractors shall immediately contact the Contra Costa county coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines § 15064.5(e)(1). If the county coroner determines that the remains are Native American, the Park District and/or its contractors shall contact the NAHC, in accordance with HSC § 7050.5(c), and PRC § 5097.98. Per PRC § 5097.98, the Park District shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the Park District and/or its contractor has discussed and conferred, as prescribed in this section (PRC § 5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.	LTS
Impact CUL-6: Excavation, earth moving, and trenching for utilities during construction of the Proposed Project could have an adverse impact on known and currently undiscovered tribal cultural resources on the Project site.	PS	<u>Mitigation Measure CUL-6a:</u> Implement Mitigation Measure CUL-3a. <u>Mitigation Measure CUL-6b:</u> Implement Mitigation Measure CUL-5.	LTS
GEOLOGY AND SOILS			
The site is likely subject to strong seismic ground shaking during the design life of the Project, this	PS	<u>Mitigation Measure GEO-1:</u> Any construction built as a result of the implementation of the Project shall meet the requirements of the current California Building Code Vol. 1 and 2, including the California Building Standards, current edition, published by the	LTS

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could result in damage to improperly designed structures on unstable geologic units and expansive soils.		International Conference of Building Officials, and as modified by the amendments, additions and deletions as adopted by the City of Fremont, California. Structures already present at the site and planned for reuse as part of the Project should be evaluated for seismic stability in accordance with Fremont General Plan Policy 10-2.5: Removal of Susceptible Structures, and Implementation 10-2.5.A: Seismic Retrofit Programs.	
Seismic-related Ground Failure, including liquefaction and expansive soils	PS	<u>Mitigation Measure GEO-2:</u> Design-level Geotechnical recommendations shall be prepared for the Project under the direction of a California Registered Geotechnical Engineer, or Registered Civil Engineer experienced in geotechnical engineering. The Geotechnical recommendations shall be based on the information developed for the site and shall establish the seismic design parameters, as determined by the geotechnical engineer or civil engineer in accordance with requirements of the California Building Code, for improvements to the Project site. The Geotechnical recommendations and design plans shall identify specific measures to reduce the liquefaction potential of surface soils in areas where liquefaction would pose a risk to health and safety in accordance with Public Resources Code Section 2693 (c).	LTS
Potential impacts of erosion and expansive soils	PS	<u>Mitigation Measure GEO-3:</u> In accordance with the Clean Water Act and the State Water Resources Control Board (SWRCB), the Park District for any construction projects that disturb more than one acre shall file a Storm Water Pollution Prevention Plan (SWPPP) prior to the start of construction. The SWPPP shall include specific best management practices (BMPs) to reduce soil erosion. This is required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit). Additionally, any construction activities planned as a result of the implementation of the plan shall require an Erosion Control Plan to be submitted to the City of Fremont in conjunction with a Grading Permit Application. The Plan shall include winterization, dust, erosion and pollution control measures conforming to the California Stormwater Quality Association (CASQA) Best Management Practices handbooks, with sediment basin design calculations. The Erosion Control Plan shall describe the "best management practices" (BMPs) to be used during and after construction to control pollution resulting from both storm water and construction water runoff. The Plan shall include locations of vehicle and equipment staging, portable restrooms,	LTS

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		<p>mobilization areas, and planned access routes.</p> <p>Recommended soil stabilization techniques include placement of plastic-free straw wattles, silt fences, berms, and gravel construction entrance areas or other control to prevent tracking sediment off-site onto city streets and into storm drains, as well as hydroseeding or planting of all disturbed areas.</p>	
Liquefaction and expansive soils	PS	<p><u>Mitigation Measure GEO-4: Unstable Geologic Units and Expansive Soils:</u> Proper foundation engineering and construction of any structures built as a result of implementation of the Project shall be performed in accordance with the recommendations of a Registered Geotechnical Engineer or Civil Engineer experienced in geotechnical design and a Registered Structural Engineer or Civil Engineer experienced in structural design. Geotechnical recommendations shall address zones of potentially liquefiable or expansive soil as they relate to proposed improvements and provide foundation, road pavement section, concrete slab-on-grade, utility construction and other recommendations to mitigate any zones encountered.</p> <p>The structural engineering design shall incorporate seismic parameters as outlined in the current California Building Code. The Geotechnical recommendations shall establish the seismic design parameters, as determined by the geotechnical engineer in accordance with requirements of the current California Building Code.</p>	LTS
GREENHOUSE GAS EMISSIONS			
<i>The Project would not result in significant Project or cumulative impacts related to greenhouse gas emissions therefore, no mitigation measures are required.</i>			
HAZARDS AND HAZARDOUS MATERIALS			
Potential ecological impact of contaminated soils	PS	<p><u>Mitigation Measure HAZ-1: Soil Testing and LANL Benchmarks:</u> The Park District shall conduct sampling and testing of surface and near-surface soils in the areas of the Western Wetlands Natural Unit that are proposed for wetland restoration. The sampling and testing program shall include concentrations of pesticide residues, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endrin, endrin aldehyde, delta-BHC, chlordane (alpha and gamma), endosulfan (I and II), endosulfan sulfate, methoxychlor, and toxaphene. The test results shall be compared to the ecological screening benchmarks for soil and sediment (ECORISK Database) developed by Los Alamos National Laboratory (LANL). If no samples exceed the respective LANL benchmarks, no further mitigation is required.</p>	LTS

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		<u>Mitigation Measure HAZ-2: Ecological Risk Assessment:</u> Using the results of testing for organochlorine pesticides from Mitigation Measure HAZ-1, the Park District shall conduct a focused ecological risk assessment to evaluate the effects of known concentrations of pesticide residues, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endrin, endrin aldehyde, delta-BHC, chlordane (alpha and gamma), endosulfan (I and II), endosulfan sulfate, methoxychlor, and toxaphene, relative to likely ecological receptors at the site, particularly insectivorous birds and mammals. If the predictive ecological assessment identifies significant risk, Mitigation Measures HAZ-3, HAZ-4, and HAZ-5 shall be implemented. If the predictive ecological assessment does not identify significant risk, no further mitigation is required.	
		<u>Mitigation Measure HAZ-3: Site Specific Health and Safety Plan:</u> If the assessment described in Mitigation Measure HAZ-2 identifies significant risk, a Site-Specific Health and Safety Plan for construction workers shall be prepared by the Park District and approved by an industrial hygienist prior to the start of any earthmoving activities associated with the alternative remediation strategies. The site-specific Health and Safety Plan shall be implemented by the Construction Contractors during remediation work. The Site-Specific Health and Safety Plan shall be prepared in accordance with the California Division of Occupational Safety and Health (CAL/OSHA) Standards identified as part of Title 8 of the California Code of Regulations.	
		<u>Mitigation Measure HAZ-4: Site Specific Air Quality Monitoring Plan:</u> If the assessment described in Mitigation Measure HAZ-2 identifies significant risk, an Air Quality Monitoring Plan shall be prepared by the Park District and approved by the California Department of Toxic Substances Control (DTSC) and/or other regulatory oversight agency or agencies reviewing the remediation of the Project area, prior to the start of any earthmoving activities associated with remediation strategies. The Air Quality Monitoring Plan shall be implemented by the Construction Contractors during remediation work in order to prevent toxic dust in the air from reaching levels that are hazardous to the workers and/or surrounding residents. The Air Quality Monitoring Plan shall be prepared in accordance with the CAL/OSHA Standards identified as part of Title 8 of the California Code of Regulations.	
		<u>Mitigation Measure HAZ-5: Soil Remediation:</u> Contaminated soil shall be excavated and disposed offsite at a permitted Class II or Class III disposal facility, if required. Alternatively, soils with very low levels of contamination that do not pose a human	

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		health risk could be used beneficially as fill below paved parking areas or areas that receive aggregate base as a capping. Remediation shall include confirmation samples from excavations within remedial areas to limit the volume removed and verify that identified contaminated soil has been removed from the site. Adequate dust mitigation measures during excavation shall be implemented, and may include, but are not limited to, application of water and dust suppressants helps to control airborne particles, restrictions and/or limits to soil movement procedures, use of personal protective equipment (PPE), respirators, and decontamination procedures to reduce potential exposure to and spreading of contaminants. Truck cleaning shall include dry brushing after loading and using wheel grates to knock off excess dirt upon exiting the site. Soil loads in trucks shall be wetted slightly, leveled, and covered to minimize soil falling onto roadways. Transportation routes, times of work, and dust controls shall be chosen to reduce impacts to residential and other sensitive areas during removal and transport over public right-of-way (ROW). Remediation shall be conducted in coordination with, and approval of, the California Department of Toxic Substances Control (DTSC) and the San Francisco Bay Regional Water Quality Control Board (RWQCB), should testing indicate soil contamination at levels requiring remedial action.	
Potential impact of asbestos and lead-based paint in structures on the site, including nearby schools	PS	<u>Mitigation Measure HAZ-6: Asbestos and Lead-Based Paint:</u> For the Labor Contractors residence and any other structures that are demolished or disassembled, the Park District shall incorporate into contract specifications the requirement that the contractor(s) remove all potentially friable asbestos-containing building materials (ACBMs) in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition that may disturb the materials, by a contractor registered with Cal/OSHA as an asbestos abatement contractor. The contractor performing abatement shall hold the C-22 asbestos abatement license or a B-class general license with asbestos certification. Because asbestos-containing materials on the project site are likely to become friable during demolition, all such materials must be abated prior to demolition. All demolition and disassembly activities shall be undertaken in accordance with Cal/OSHA standards, contained in Title 8 of the California Code of Regulations (CCR), Section 1529, to protect workers from exposure to asbestos. All friable asbestos materials, and any non-friable materials that may become friable during abatement, shall be disposed of	LTS

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		<p>as hazardous (regulated) asbestos-containing material. Non-friable materials that are not made friable may be disposed of as non-hazardous asbestos-containing material. A 10-day notice of planned asbestos removal and disposal shall be given to the Bay Area Air Quality Management District (BAAQMD), along with a notification of demolition of structure(s). The local office of the State Occupational Safety and Health Administration (OSHA) shall be notified at least 24 hours prior to abatement activities.</p> <p>For the Labor Contractors residence and any other structures that are demolished or disassembled, the Park District shall incorporate into contract specifications the requirement that the contractor(s) remove all potential lead-based paint. Personnel must have lead training sufficient to meet the requirements of Cal/OSHA, 8 CCR 1532.1. The workers shall use lead-safe work practices when handling paints with any detectable amount of lead. A containment area shall be used to prevent the buildup of lead dust on remaining surfaces, in compliance with California Department of Public Health requirements. All waste streams created as part of the project shall be profiled or characterized prior to disposal, and packaged as applicable, in compliance with the requirements of the California Department of Toxic Substances Control and Title 22.</p>	
HYDROLOGY AND WATER QUALITY			
Erosion and Sediment Control	PS	<p><u>Mitigation Measure HYDRO-1: Erosion and Sediment Control:</u> The Park District shall prepare a Soil Erosion Control and Revegetation Plan that addresses temporary construction-related temporary erosion control and provides permanent erosion control through revegetation and other means. The Plan, which can be a part of the project SWPPP see (HYDRO-2) shall be incorporated into the Project's Construction Documents. The Construction Plans shall specify erosion and sediment control measures, including Best Management Practices (BMPs) to control short-term construction-related water quality impacts. BMPs shall include at a minimum the following measures (where applicable):</p> <ul style="list-style-type: none"> Limiting access routes and stabilizing access points. Surface disturbance of soil and vegetation shall be minimized; existing access and maintenance roads shall be used wherever feasible. 	LTS

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		<ul style="list-style-type: none"> • Stabilizing graded areas as soon as possible following completion of disturbance with seeding, mulching, and installation of erosion control materials such as erosion control blankets and straw rolls, or other approved and effective methods. Only native seed and plant materials shall be used, unless otherwise approved by the Qualified Biologist. • Delineating clearing limits, easements, setbacks, environmentally sensitive areas, and drainage courses by marking them in the field, and installing exclusion fencing, silt fencing, and/or coir logs or straw rolls. • Stabilizing and preventing sediment from entering temporary conveyance channels and stormdrain outlets. • If rainfall is expected to occur, using temporary sediment control measures, such as additional silt fencing, straw rolls, covering stock piles and directing runoff to sediment detention structures to filter and remove sediment. • Use temporary measures, such as flow diversion, temporary ditches, and silt fencing or straw wattles. • Any stockpiled soil shall be placed, sloped, and covered so that it would not be subject to accelerated erosion. • Accidental discharge of all Project related materials and fluids into local waterways shall be avoided by using straw rolls or silt fences, constructing berms or barriers around construction materials, or installing geofabric in disturbed areas with long, steep slopes. • After ground-disturbing activities are complete for each Project component constructed, all graded or disturbed areas shall be covered with protective material such as mulch, and re-seeded with native plant species. The Erosion Control and Revegetation Plan SWPPP shall include details regarding site preparation, top soiling or composting, seeding, fertilizer, mulching, and temporary irrigation. 	
		<p><u>Mitigation Measure HYDRO-2: Stormwater Pollution Prevention Plan:</u> A Stormwater Pollution Prevention Plan (SWPPP) and a Spill Control and Countermeasures Plan (SCCP) shall be prepared and implemented by the Park District's Construction Contractor following SWRCB standards for erosion control and stormwater management. Specific measures, as cited below, shall be adapted from the most current edition of the Stormwater Best Management Practice Handbook for Construction, published by the California Stormwater Quality Association (CASQA).</p>	

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		The SWPPP shall include Best Management Practices (BMPs) to prevent or minimize stormwater pollution during construction activities, as well as addressing post construction stormwater management and permanent erosion control. The Project Erosion Control and Revegetation Plan, and Spill Control and Countermeasures Plan, shall be included as part of the SWPPP. Plan preparation and implementation shall be included in the Project's Construction Documents.	
		<u>Mitigation Measure HYDRO-3: Equipment Maintenance:</u> All refueling and/or maintenance of heavy equipment shall take place at a minimum of 50 feet away from the top of bank of creeks and all identified jurisdictional wetlands and Waters of the US drainage courses. The refueling/maintenance and construction staging area shall be bermed, graveled, or covered with straw and incorporate measures for capture of any accidental spills. All temporary construction lay-down and staging areas shall be restored upon completion of work with silt fences, straw rolls, and ground bags, etc. removed.	
Potential impact of wells on groundwater	PS	<u>Mitigation Measure HYDRO-4: Well:</u> The Park District shall coordinate and consult with the Alameda County Water District and obtain a permit or approval prior to implementing the following: <ul style="list-style-type: none"> • Deconstruction and closure of abandoned wells and related irrigation and drainage infrastructure. • Drilling for piers or wells that may penetrate groundwater aquifers. • Provide continued access to existing monitoring wells and continue to cooperate with ACWD in monitoring activities. 	LTS
		<u>Mitigation Measure HYDRO-5: Unused Septic Tank and Leachfield Systems:</u> The Park District shall obtain a permit or approval from Alameda County Environmental Health for the closure and abandonment of obsolete and unused septic tank and leachfield systems.	
Potential stormwater impacts	PS	<u>Mitigation Measure HYDRO-6: Stormwater Management:</u> The Park District shall prepare and implement a post construction stormwater management plan in compliance with the City of Fremont's joint municipal stormwater permit and development permit program.	LTS
Potential flood hazards	PS	<u>Mitigation Measure HYDRO-7: Bridge Design:</u> The Park District shall prepare and submit final bridge plans for all new vehicular and pedestrian bridges that cross waterways under jurisdiction by the City of Fremont or Alameda County. The bridge plans are subject to review and approval by the City of Fremont Engineering	LTS

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		Department and Alameda County Flood Control and Water Conservation District. The bridge plans shall include structural engineering, geotechnical engineering, and hydraulic engineering information. The responsible designer shall be a State of California licensed Civil Engineer and shall be experienced in hydraulic analysis, bridge design, and flood channel and bank protection design. The Engineering Plans shall demonstrate conformity to City of Fremont, Alameda County, and FEMA floodplain management regulations and include design elevations of the bridge/boardwalk, conformity with 100-year flood elevation freeboard requirements, the locations and structural design of the bridge abutments with respect to flood flows, bridge loading, and channel bank protection requirements.	
LAND USE AND PLANNING			
<i>The Project would not result in significant Project or cumulative impacts related to land use and planning; therefore, no mitigation measures are required.</i>			
MINERAL RESOURCES			
<i>The Project would not result in significant Project or cumulative impacts related to land use and planning; therefore, no mitigation measures are required.</i>			
NOISE			
Temporary noise impacts	PS	<u>Mitigation Measure NOI-1:</u> To mitigate temporary noise impacts, the following BMPs shall be incorporated into the construction documents to be implemented by the Project Contractor: <ul style="list-style-type: none"> • Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards. • Use quietest type of construction equipment whenever possible, particularly air compressors. • Locate stationary equipment, material stockpiles, and vehicle staging areas as far as practicable from sensitive receptors. • Prohibit unnecessary idling of internal combustion engines. • Designate a noise (and vibration) disturbance coordinator at the Park District who shall be responsible for responding to complaints about noise (and vibration) during construction. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler) and determine and implement reasonable measures warranted to correct the problem. • Limit noise generating activities to the weekday hours of seven a.m. to seven 	LTS

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		p.m. and the Saturday or holiday hours of nine a.m. to six p.m., with Sunday noise not allowed per City noise ordinance.	
POPULATION AND HOUSING			
<i>The Project would not result in significant Project or cumulative impacts related to land use and planning; therefore, no mitigation measures are required.</i>			
PUBLIC SERVICES			
<i>The Project would not result in significant Project or cumulative impacts related to public services; therefore, no mitigation measures are required.</i>			
RECREATION			
<i>The Project would not result in significant Project or cumulative impacts related to recreation; therefore, no mitigation measures are required.</i>			
TRANSPORTATION AND TRAFFIC			
Impact TRANS-1: The Proposed Project would result in an increase in traffic delays at the Commerce Drive/Paseo Padre Parkway/Patterson Ranch Road intersection.	PS	<u>Mitigation Measure TRANSP-1:</u> To mitigate excessive vehicle traffic delays at the Patterson Ranch Road approach, the City of Fremont should institute “Right Turn Only” from the Patterson Ranch Road and Commerce Drive approaches during peak commute times. Vehicles would have the opportunity to either turn off Paseo Padre Parkway or make a U-turn at adjacent intersections with Ardenwood Boulevard or Kaiser Drive. Traffic signs, striping, and raised curbs may be needed to reinforce the right-turn only requirement. The Park District shall contribute its fair share (one percent) toward the cost of the improvements.	LTS
Impact TRANS-2: The Proposed Project would increase use of the pedestrian and bicyclist crosswalk at Paseo Padre Parkway, which is not signalized.	PS	<u>Mitigation Measure TRANSP-2:</u> The Proposed Project shall contribute a fair share (one percent) of the cost of future intersection modifications to improve pedestrian and bicycle access across Paseo Padre Parkway, at or before the time the City of Fremont implements intersection modifications. These intersection improvements may consist of: <ul style="list-style-type: none"> • Narrow the lanes on Paso Padre Parkway from 12 feet to 11 feet. • Stripe a horizontal buffer between the right-most vehicle lane on northbound and southbound Paso Padre Parkway to provide greater separation between bicyclists and vehicles. • Shorten the northbound right turn weaving area to slow vehicles before the weaving maneuver and adding green pavement markings to indicate the weaving zone. 	LTS

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
		<ul style="list-style-type: none"> • Install additional warning signs in advance and at the bicycle-vehicle weaving area and the pedestrian crosswalks. • Upgrade the crosswalks from transverse markings (two white lines) to continental markings. • Add yield lines 30 feet in advance of the crosswalks. • Install a pedestrian hybrid beacon in both directions of Paseo Padre Parkway. • The pedestrian hybrid beacon may be installed to allow upgrading to a full traffic signal in the future. 	
Impact TRANSP-3: Vehicle traffic generated by the Proposed Project could worsen the Level of Service at the intersection of Paseo Padre Parkway/ Patterson Ranch Road/Commerce Drive.	PS	<u>Mitigation Measure TRANSP-3:</u> Implement Mitigation Measure TRANSP-1.	LTS
Impact TRANSP-4: Bicycle and pedestrian traffic generated by the Proposed Project could increase transportation hazards at the intersection of Paseo Padre Parkway/ Patterson Ranch Road/Commerce Drive.	PS	<u>Mitigation Measure TRANSP-4:</u> Implement Mitigation Measure TRANSP-2.	LTS
Impact TRANSP-5: Bicycle and pedestrian traffic generated by the Proposed Project could worsen the bicycle and pedestrian safety at the intersection of Paseo Padre Parkway/ Patterson Ranch Road/Commerce Drive.	PS	<u>Mitigation Measure TRANSP-5:</u> Implement Mitigation Measure TRANSP-2.	LTS

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Significant Impact	Significance Before Mitigation	Mitigation Measures	Significance With Mitigation *
TRIBAL CULTURAL RESOURCES			
See Cultural and Tribal Cultural Resources, above.			
UTILITIES AND SERVICE SYSTEMS			
Construction and Demolition Debris	PS	<u>Mitigation Measure UTIL-1: Construction and Demolition Debris:</u> Prior to completion of the plans and specifications, the Park District shall review the plans to ensure that they include a solid waste recovery plan. This recovery plan shall be in compliance with the Park District’s adopted sustainability policy, which is directed at minimizing disposal of solid waste generated during construction in accordance with applicable state and county codes. The recovery plan shall address, at a minimum, recycling of asphalt and concrete paving materials, lumber and metal and concrete pipes and tanks, and balancing graded soil on site to the maximum extent feasible.	LTS

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2.4 Unavoidable Significant Impacts

Section 15126.2(b) of the CEQA Guidelines requires that an EIR identify any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. As discussed in 4.2 Cultural and Tribal Cultural Resources, disassembly of the Contractors Residence would result in a Significant and Unavoidable Impact on historic architectural resources.

2.5 Alternatives to the Project

This CEQA review analyzes the following alternatives to the Proposed Project:

No Project Alternative

Under the No Project Alternative, the site would remain in its existing condition. There would be no visitor serving facilities or trails constructed that would allow public access and use of the site. No habitat restoration, enhancement, and wildlife management, or vegetation and pest management would occur. The existing archaeological resources and human remains on the site would not be disturbed. The existing historic structures on the site, the Milk House and Contractors Residence, would remain in their current condition. No utility upgrades and extensions, or climate change and sea level rise adaptation, would occur on the site.

Restore Contractors Residence in Place Alternative

The Restore Contractors Residence in Place Alternative would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Under this alternative, the Contractors Residence would remain in its current location, and be restored in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995). To properly stabilize the Contractors Residence for restoration, the building's foundation would require repair and reconstruction. This would involve mobilization of heavy equipment in the vicinity of the structure in order to lift the building for foundation work. In addition to the foundation repair work, continuous contractor vehicle traffic bringing in labor, equipment and materials would be required over an estimated six to eight month period.

Relocate and Restore Contractors Residence Alternative

The Relocate and Restore Contractors Residence Alternative would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Under this alternative, the Contractors Residence would be relocated to the Farm Yard Agricultural Unit, to a site that is not underlain by sensitive cultural resources, and restored in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995). Moving the Contractors Residence would require bringing in heavy equipment in order to lift the house onto a house-moving platform truck and trailer.

Hand Disassemble, Relocate, and Restore Contractors Residence Alternative

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Like the Proposed Project, this alternative would involve dismantling of the Contractors Residence with hand tools. Unlike the Proposed Project, the Contractors Residence would be

relocated at a site in the Farm Yard Agricultural Unit that is not underlain by sensitive cultural resources, and restored in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995). Compared to the other alternatives discussed above, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would involve more work done by hand, and would take longer.

Environmentally Superior Alternative

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be the Environmentally Superior Alternative.

3 PROJECT DESCRIPTION

3.1 *Project Summary*

The Coyote Hills Restoration and Public Access Project aims to restore habitat and add public access facilities to a 306-acre parcel that would become part of Coyote Hills Regional Park. The existing Coyote Hills Regional Park is located in the northwest corner of the City of Fremont, east of the Don Edwards San Francisco Bay Wildlife Refuge, and north of State Highway Route 84, leading to the Dumbarton Bridge (see **Figure 3-1 - Regional Location Map**). The 306-acre Expansion area borders the east side of the existing Regional Park; is bounded to the east by Ardenwood Boulevard and Paseo Padre Parkway; and is bounded to the north by the Alameda Creek Flood Control Channel.

The Proposed Project consists of two main components, a Land Use Plan Amendment (LUPA) and a Park Development Plan, both prepared by the East Bay Regional Park District (Park District). The LUPA amends the 2005 Coyote Hills Regional Land Use Plan to include the 306-acre Park expansion and its land uses. The Park Development Plan outlines the restoration and visitor-serving facilities and public access trail development proposed for the Expansion area. These components are discussed in more detail below.

The proposed Park expansion includes a new entry kiosk, parking lot, restroom and family picnic facilities, entry area improvements, Park signage, over 4 miles of new hiking trails, wildlife observation platforms, and approximately 130 acres of habitat restoration and enhancement. The Trail Plan would provide connections to the San Francisco Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway to the south and north, and a connection to the City's proposed Dumbarton Bridge to Quarry Lakes and other regional trails. A flood control and wetlands mitigation Project covering about 100 acres in the southern part of the Project area would be constructed in cooperation with Alameda County Flood Control and Water Conservation District.

Proposed habitat restoration and enhancement types would include willow thicket and mixed riparian forest along and adjacent to Patterson Slough north of Patterson Ranch Road, as well as oak savanna, seasonal wetlands, and enhanced grasslands. The Project would protect existing views of the Coyote Hills along Paseo Padre Parkway, continue urban agriculture along this corridor, and preserve, protect and interpret the site's rich natural resources, Native American culture, and historic resources. Urban agriculture and agricultural-related activities, such as a farm stand, would be located on approximately 45 acres of land south of Patterson Ranch Road and north of Ardenwood Creek.

Provisions of Park District Ordinance 38 applicable to the adjoining Coyote Hills Regional Park would be extended to the Park Expansion area. As such, Park operating hours would be from dawn to dusk and no lighting other than security lighting in areas of buildings would be provided. Consistent with current regulations at Coyote Hills Park, the Park Expansion area would be designated as a "Leash Required Area" for Park visitors with dogs, with no leash optional open areas. Signage and fencing would be used to keep Park visitors, including un-leashed dogs, on trails and other designated public areas and out of existing and restored habitat. The remnant existing and restored willow thicket and mixed riparian area along Patterson Slough would be fenced, signed, and designated as a "Special Protection Feature." All general public access would be restricted from this area, with the exception of a foot path spur trail leading to a wildlife observation platform on the southwest end of the Slough. The west Slough overlook or footpath would follow an existing dirt maintenance access road to a proposed wildlife observation platform at the location of the demolished former Farm Labor House dormitories. These were demolished in 2016.

Restoring Park resources and managing the Park as a "Climate Smart Park," including accommodating climate change and anticipated San Francisco Bay sea level rise-related threats to the

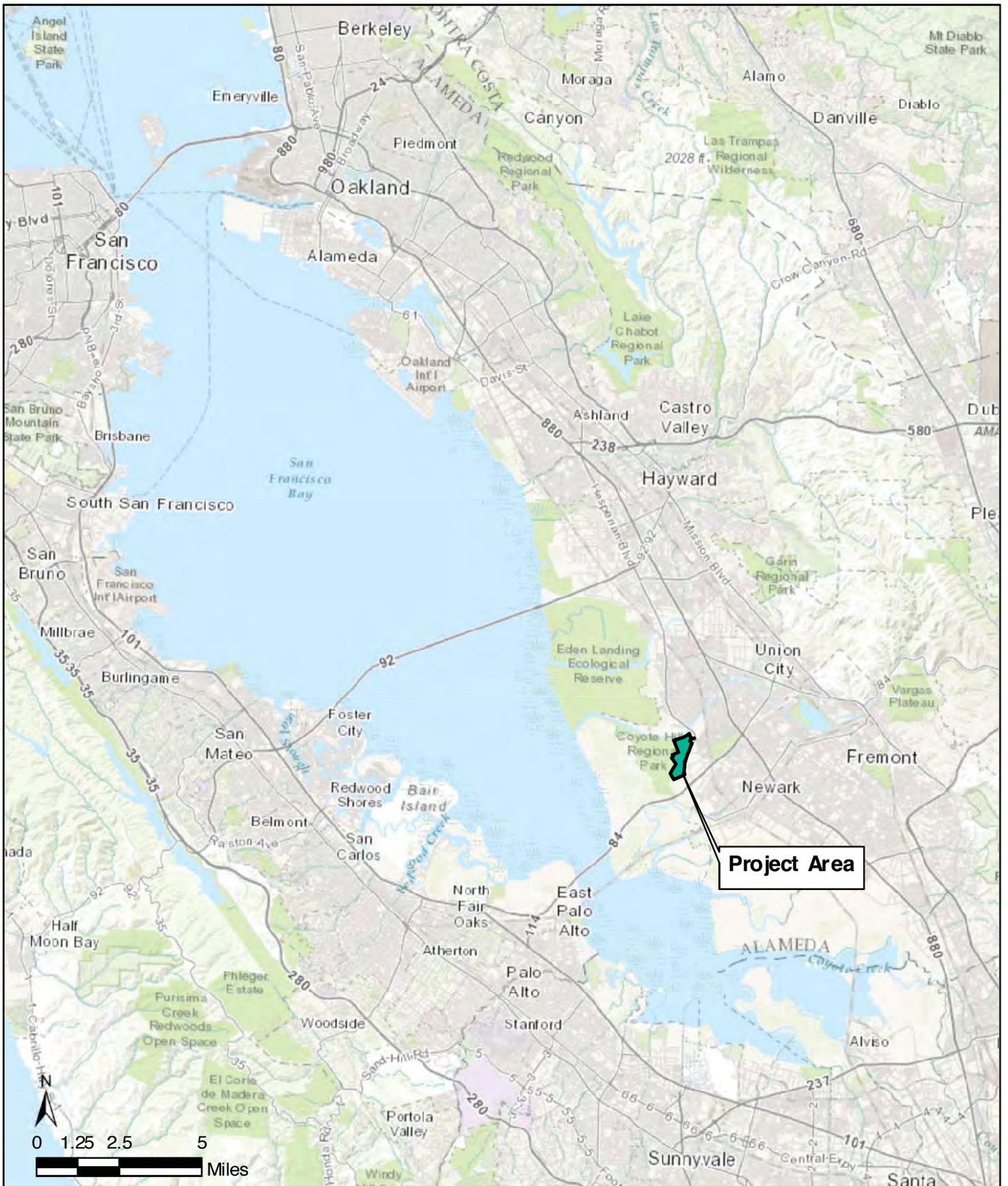


FIGURE 3-1
REGIONAL LOCATION MAP
COYOTE HILLS LAND USE PLAN AMENDMENT

DATE: 3-5-19



2M Associates
 Landscape Architecture
 Planning • Horticulture

Park's resources, and using urban agriculture and a relatively large native tree afforestation Project to trap or sequester atmospheric carbon and other greenhouse gases (GHGs), are other important components of the Proposed Project. The Project would also provide opportunities for cooperative research and public education on these issues within the Park Expansion area. The Project components would be implemented over a three- to five-year period, as funding and capacity allows.

As lead agency, the Park District has prepared this environmental document in accordance with the California Environmental Quality Act (CEQA). This document presents the recommendations and actions contained in the LUPA that would result in physical changes to the baseline environmental conditions within the Project Area. The proposed physical changes, referred to collectively as the "Project," are summarized in this Project Description. Additional, more detailed descriptions of these proposals, as found in the LUPA and supporting documents for the Park Development Plan, including the Existing Environmental Conditions and Opportunities and Constraints Report, are incorporated by reference into this CEQA document.

3.2 Planning and Design Principles and Program Objectives

The LUPA and Park Development Plan have been developed with the following general design principles and planning objectives:

- Ensuring integration of the Expansion area with the existing Regional Park facilities, uses and resources, as well as the resources of the greater Coyote Hills area.
- Protecting and/or enhancing cultural resources, including providing compatible recreational and interpretive opportunities.
- Protecting and/or enhancing biological resources, while providing recreation, educational and interpretive opportunities.
- Providing for public safety, cultural and biological resource preservation at Coyote Hills through the removal of the deteriorated Contractors residence which has become an attractive nuisance and fire and public safety hazard, and encroaches into sensitive cultural and biological resource areas.
- Removing the Contractors residence in a way that balances cultural and biological resources protection with a wise use of public resources and in a timely manner.
- Protecting and managing surface water and groundwater resources within the Park Expansion area, in cooperation with local agencies.
- Providing opportunities for urban agriculture.
- Providing opportunities for a variety of outdoor recreation activities, including hiking and bicycling, wildlife viewing, picnicking and environmental education.
- Developing and managing the Expansion area to be adaptable and sustainable, with awareness of a changing climate that may affect habitat and public access.
- Designing improvements for low maintenance, high durability and to reduce park operating cost, where feasible.
- Providing opportunities for Climate Smart education as well as scientific research and demonstration through pilot Project programs.

A more complete description of Project Goals and Objectives is included in the LUPA.

3.3 Land Use Plan Amendment and Park Development Plan

Land Use Plan Amendment Unit Designations

The Project Area varies across the 306 acres with respect to soil and hydrologic conditions, plant and wildlife habitat, and current use. To create a land use and development plan appropriate for these varied characteristics, the Project Area has been separated into three Land Use designations subdivided into five Planning Units. These are shown in **Figure 3-2 –Land Use Units and Facilities Map Amendment** and summarized below in **Table 3-1 - Plan Summary**. Each Planning Unit encompasses a geographic region of similar use and physical and biological conditions. The Planning Units (units) are used in LUPA where they are referred to as the five Land Use Plan Amendment Units. Proposed trails and visitor-serving facilities are also briefly discussed in this section for each unit, and more fully described in the subsequent section on the proposed Park Development Plan.

TABLE 3-1: LUPA PLAN SUMMARY

Land Use Designation	Planning Unit	Acreage
Natural	Patterson Slough	126
	Western Wetlands	29
	Southern Wetlands	99
Agricultural	Historic Patterson Ranch Farm	45
Recreational	Ranch Road Recreation	7
Total		306

The three land use designations are: Natural Use, Recreational Use, and Agricultural Use. A majority of the Project Area is designated for Natural Use (254 acres). The Natural Use designation includes three of the planning units: Patterson Slough, Western Wetlands, and Southern Wetlands. Development of the three Natural Use Units would consist of habitat restoration and enhancement, flood control and wetlands mitigation, and trail development. The Agricultural Use designation includes the Historic Patterson Ranch Farm Unit, which would continue to be used for agricultural purposes. The Recreational Use designation includes the Ranch Road Recreation Unit that would be used for trails, parking and other Visitor-serving facilities.

The focus of designated Natural Units is on wildlife habitat and native plant community management. Visitor-serving facilities such as parking areas, restrooms, and picnic areas occur in Recreation Units. Farming, livestock, and grazing are the principal designated land-uses in Agricultural Units. Included in this designation are areas for repair and storage of farm equipment and machinery, and crop processing and storage, such as hay storage. Also specifically allowed in the Agricultural Units are farm stands for produce sale. Public access trails, small trail head and staging areas, wildlife viewing platforms, and interpretive panels and displays are allowable uses in all Units. The public access trails would also be used for Emergency Vehicle and Maintenance Access (EVMA). Each of the Planning Units, its location, and current and future use as proposed are described below.

Patterson Slough Natural Unit

The Patterson Slough Natural Unit is the northernmost Unit of the Project Area. The Unit covers 126 acres and lies north of Patterson Ranch Road. The Patterson Slough drainage way is in the approximate center of the Unit, flowing slowly northeast through the DUST Marsh to eventually drain to the Alameda Creek Flood Control Channel. A remnant willow-dominated riparian forest

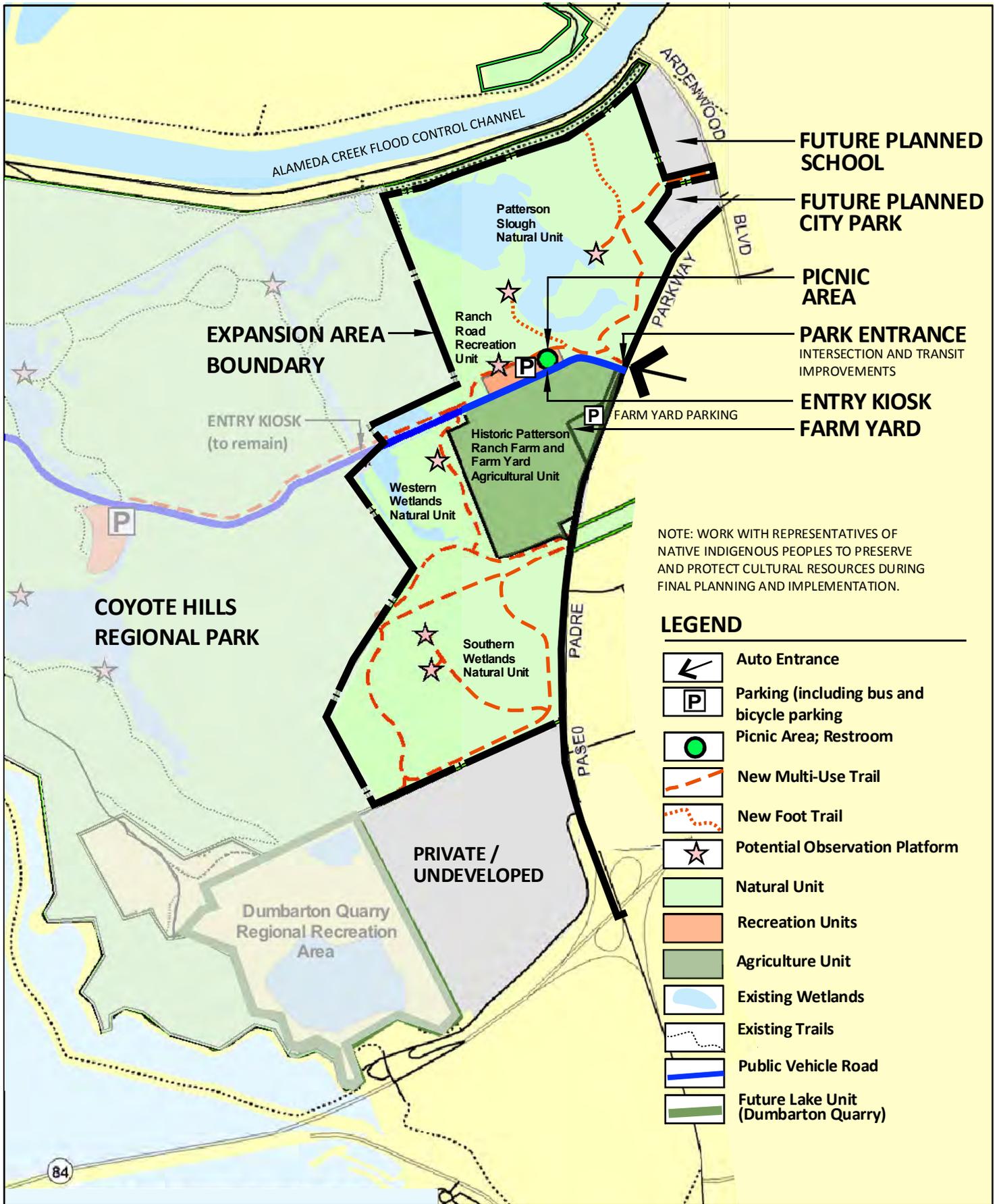


FIGURE 3-2
LAND USE UNITS AND FACILITIES MAP AMENDMENT
COYOTE HILLS LAND USE PLAN AMENDMENT
 DATE: 3-5-19

containing abundant invasive weeds lines the Slough. This area has known culturally sensitive resources that would be protected during restoration by installing Environmentally Sensitive Area (ESA) fencing around sensitive areas, and by requiring the presence of a qualified Cultural Resource Monitor and representatives of the Ohlone peoples when soil disturbance associated with restoration, demolition, and limited trail construction work occurs in sensitive areas. Restoration and enhancement may include activities such as topsoil grading/tilling, seeding, planting, soil amendment (compost addition) and temporary irrigation, followed by several years of vegetation management, such as flail mowing. These activities would be implemented as needed to exhaust the weed-seed bank in the topsoil, with the revegetation and restoration work establishing areas of willow sausal or willow thicket, mixed riparian forest, oak savanna, seasonal wetlands, and native grasslands. Up to 6,000 to 8,000 native trees and shrubs, including oaks planted as acorns and seedlings, and live cottonwood and willow stakes, would be planted in this area over a proposed three- to five-year implementation period. Other native tree and shrub species obtained from nurseries primarily located in the East Bay including coast live oak (*Quercus agrifolia*), western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), arroyo willow (*Salix lasiolepis*), and box elder (*Acer negundo*).

Shallow depressions would be created to establish seasonal wetland by either shallow excavations (~1-2 feet) below current grades/elevations, or by importing clean soil to cap over existing grades to establish a more complex topography and support wetland creation. Grassland and oak savanna areas considered too dry for riparian restoration would be mowed and/or grazed for fire fuels management, weed control and agricultural purposes.

A trail system would be constructed connecting the existing Crandall Creek Trail, the San Francisco Bay Trail and the Ranch Road Recreational Unit trails. The new trails would include paved multi-use segments and foot paths, with two spur trails to wildlife observation platforms along the east and west sides of Patterson Slough. The wildlife observation platforms would be setback a minimum of 100 feet from the edge of Patterson Slough in voluntary compliance with City of Fremont Watercourse Protection requirements per Municipal Code Section 18.210.120. As part of a future phase of the project, the Park District would cooperate with the City of Fremont and the Alameda County Flood Control and Water Conservation District (ACFCWCD) in constructing an approximately 550-foot long, 10-foot wide clear span aluminum walkway cantilevered (attached) to the west side of the existing Ardenwood Boulevard Bridge over Alameda Creek. This offsite improvement would significantly enhance pedestrian and bicycle safety for the north-south connection of the San Francisco Bay Trail over Alameda Creek.

Western Wetlands Natural Unit

The Western Wetlands Natural Unit is located south of the Paterson Slough Natural Unit and west of the Historic Patterson Ranch Farm Agricultural and Ranch Road Recreational Units. This 29-acre low-lying area contains a large, depressional wetland that ponds water during the winter rainy period, as well as areas that are slightly saline and sodic (salt- and sodium-affected). Although this area has been previously farmed, which required an agricultural drainage system, that system has since deteriorated and the area is now no longer suitable for farming. The plant cover is mostly invasive weedy species. The plan proposed for this area includes actions such as converting weedy areas to native grassland pasture, and managed/timed flooding of depressional ponded areas in the late summer and fall months to provide a fresh water source for wildlife use. This option depends on the availability of irrigation water from a nearby irrigation line that was once used to flood irrigate fresh water wetlands and seasonal wetlands in Coyote Hills Regional Park to the west. Minor surface grading (~1-2 feet in depth) would be used to enhance and expand seasonal wetland areas. A north-south multi-use connector trail (Harvest Trail) would run on uplands along the east side of this Unit, adjacent to agricultural fields. Native cottonwood and willow trees, similar to the current open stand of these trees to the west, would also be planted.

Southern Wetlands Natural Unit

The Southern Wetlands Natural Unit covers the southernmost land of the Project Area. This 99-acre Unit extends from the Western Wetlands Unit and Line P/Ardenwood Creek to the southern property boundary formed by the levee separating it from adjacent Cargill, Inc., lands. ACFCWCD would oversee the development, monitoring, and management of the flood control and habitat restoration elements of this Unit. This previously farmed and now fallow and ruderal area will be restored to create a mix of riparian, freshwater and seasonal wetlands, saline-alkaline wetlands, and oak savanna. Maintenance access roads would be constructed for the maintenance and monitoring activities required by the ACFCWCD, and would also provide public multi-use trail access. The Park District would be responsible for constructing and/or installing interpretive signage, wildlife observation areas, a short connector trail west of the mitigation area, and a new 80-foot long vehicular clear span bridge over Ardenwood Creek. The Park District would also be responsible for operating, and monitoring public access use within this Unit.

Historic Patterson Ranch Farm and Farm Yard Agricultural Unit

The 45-acre Historic Patterson Ranch Farm fields south of Patterson Ranch Road and immediately west of Paseo Padre Parkway in this designated Agricultural Unit would continue to be used for small-scale, local agriculture crop production, including field and row crops, pasture and hay lands, and grazing. In addition to agricultural land uses, the Farm Yard portion of the Unit would allow the adaptive re-use of a historic farm building (the Milk House) as a produce stand or other agriculturally related use. This area would also include a small, 20-car parking lot to serve users in this area. Two modern metal storage buildings would remain onsite and would continue to be used for supporting agricultural or Park operation-related activities. New utilities, including domestic water and electric service, would be extended to the existing farm buildings in the Farm Yard area. The Farm Yard entry-road, located south of Patterson Ranch Road and near to Paseo Padre Parkway, would be relocated, the area landscaped, and a new Park Entry sign installed. Connections would also be made to the new San Francisco Bay Trail along the west side of Paseo Padre Parkway, and the Bay Trail would be extended south to the vicinity of Dumbarton Circle and Quarry Road, an additional approximately 1,00 feet. The trail construction work would occur within a weedy/ruderal area within the City of Fremont Paseo Padre Parkway Road ROW. The Park District would cooperate and coordinate with the City in the construction and operation of the trail and any needed Dumbarton Circle-Paseo Padre Parkway intersection improvements.

Ranch Road Recreational Unit

Recreation and visitor-serving facilities are proposed for this approximately 7-acre Recreational Unit, located north of Patterson Ranch Road and immediately west of Paseo Padre Parkway, including an approximately 100-car asphalt-paved parking lot, a one-acre open-use area, restroom with plumbing, picnic facilities, and a new park entry kiosk. The existing Tuibun Trail, which runs between Paseo Padre Parkway and the existing Visitor Center, a distance of about 1.5 miles, would be relocated to the north of the proposed parking lot and improved in this Unit. New utilities and utility upgrades, including new water service, gas, sewer, and underground electrical and communications cables, would run through this Unit, within or adjacent to the existing road and trail, to the restroom and picnic area. These utilities would also be extended within the Patterson Ranch Road prism to the Visitor Center (see also **Utilities** section).

Park Development Plan

The proposed Park Development Plan has eight main elements:

- 1. Habitat Restoration and Enhancement*
- 2. Recreation and Visitor-serving Facilities*

- 3. *Public Access Trail Construction and Operation*
- 4. *Cultural Resources Management*
- 5. *Agricultural Land Uses and Associated Activity*
- 6. *Surface Water and Groundwater Management*
- 7. *Utility Upgrades and Extensions*
- 8. *Climate Change and Sea Level Rise*

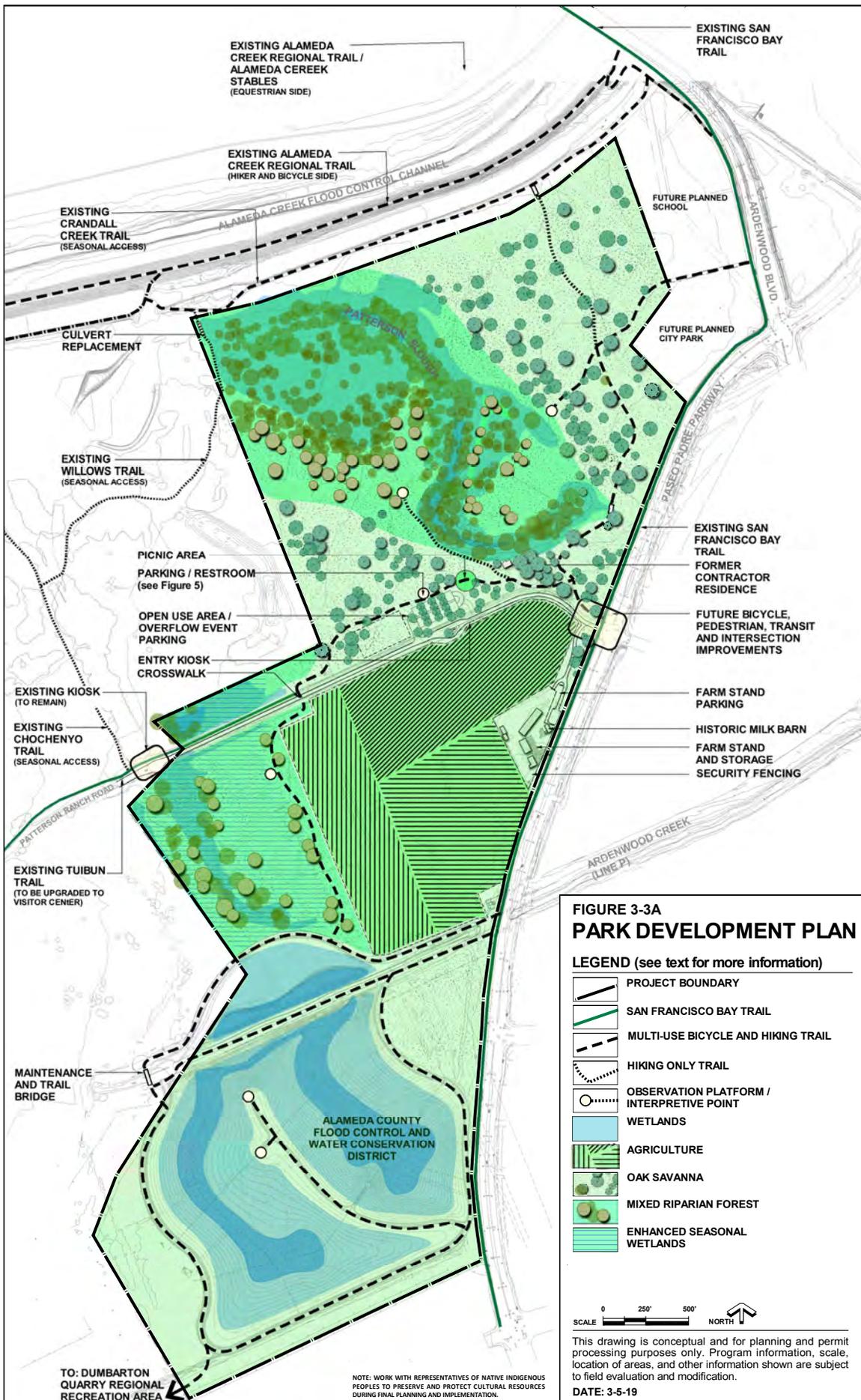
1. *Habitat Restoration and Enhancement*

Habitat restoration and enhancement actions would focus on protecting, expanding and enhancing the unique and historical willow sausal (willow thickets), expanding to the east and west the mixed riparian forest along Patterson Slough, and creating ecologically complimentary seasonal wetlands/oak savanna and native grassland areas for wildlife habitat and agricultural grazing adjacent to the Slough in the Patterson Slough Natural Unit. Restoration and enhancement also include creating and enhancing freshwater and saline-alkali seasonal wetlands and willow and cotton wood tree cluster plantings in the Western Wetlands Natural Unit. These land cover types are generally shown in **Figure 3-3A - Park Development Plan** and summarized in **Table 3-2**. This is a graphic or rendered version of the Plan. **Figure 3-3B** presents similar conceptual plan information on a recent aerial photographic base to allow readers to view the location of Proposed Project facilities with respect to landmarks and key features, such as roadways, streams and the Patterson Slough riparian corridor. Key setback distances from the edge of the sensitive Patterson Slough riparian corridor edge are also indicated on this aerial Concept Plan drawing. Target acreages for restoration and enhancement are presented in **Table 3-2**. These are based on the current understanding of site hydrology and soil conditions and are approximate. Additional soil and hydrologic fieldwork would be completed along with pilot or test plantings to develop a final Restoration Planting Plan, established Irrigation Plans, and post-planting Vegetation and Invasive Species Management Plan prior to full-scale implementation over a three- to five-year period. Public access facilities and Trail Plan Implementation would occur during the Year One pilot or planting period.

TABLE 3-2: LAND COVER AREA ACREAGE TARGET

Land Cover Designation	Possible Range (Acres)
Willow sausal and mixed riparian forest, cottonwood-willow grove	50 – 65
Seasonal Wetlands	8 – 12
Oak savanna	25 – 35
Managed and enhanced grasslands and pasture, complex topography	50 – 60
Agriculture, field and row crops	43 – 48
Roads, trails, parking, Farm Yard, and miscellaneous developed areas	5 – 7
Native landscaped areas	8 – 10
Existing willow thickets and mixed riparian forest (to be enhanced and protected)	12
Existing freshwater seasonal and saline seasonal wetlands (to be enhanced and protected)	6.5
Flood Control Basins, Mitigation freshwater, perennial, seasonal and saline-alkali wetlands, riparian and savanna	92 – 99

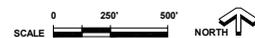
Several years of active vegetation management would occur as part of habitat restoration, including pest and weed control, mowing and/or goat grazing, and seasonal irrigation during a 3-year plant



**FIGURE 3-3A
PARK DEVELOPMENT PLAN**

LEGEND (see text for more information)

- PROJECT BOUNDARY
- SAN FRANCISCO BAY TRAIL
- MULTI-USE BICYCLE AND HIKING TRAIL
- HIKING ONLY TRAIL
- OBSERVATION PLATFORM / INTERPRETIVE POINT
- WETLANDS
- AGRICULTURE
- OAK SAVANNA
- MIXED RIPARIAN FOREST
- ENHANCED SEASONAL WETLANDS



This drawing is conceptual and for planning and permit processing purposes only. Program information, scale, location of areas, and other information shown are subject to field evaluation and modification.

DATE: 3-5-19

TO: DUMBARTON QUARRY REGIONAL RECREATION AREA

NOTE: WORK WITH REPRESENTATIVES OF NATIVE INDIGENOUS PEOPLES TO PRESERVE AND PROTECT CULTURAL RESOURCES DURING FINAL PLANNING AND IMPLEMENTATION.

establishment period. Other than selective and careful removal of several inches of the surface weed-seed containing topsoil, and replacement with imported soil and compost in some habitat restoration and enhancement areas, the proposed restoration and enhancement program for most areas would be achieved without employing large-scale grading or significantly changing site hydrologic conditions. Grasslands restoration would focus on the most visually prominent areas as seen from Ardenwood Boulevard, Paseo Padre Parkway and Patterson Ranch Road.

New seasonal wetlands would be created by grading 1- to 2-foot deep, un-drained or depressional basins in the lower lying areas, along the west side of the Park Expansion area.

Existing depressional areas may be unseasonably (late summer to fall) flooded for improved habitat value and bird watching, depending on the availability of irrigation water. This would involve reactivation of an existing irrigation line located immediately west of the Western Wetlands, and connecting it to an existing irrigation well as a source of water. Additional bird roosting areas would be created by planting willow and cottonwood trees in the seasonal wetlands along the west side of the Project, both north and south of Patterson Ranch Road.

2. Recreation and Visitor-serving Facilities Construction and Operation

Recreation and Visitor-serving Facilities are proposed for the Ranch Road Recreation Unit and the Farm Yard portion of the Historic Patterson Ranch Farm Agricultural Unit. The proposed changes and improvements to the Park Entry and Farm Yard Area, and current Parking Concept, are shown in **Figures 3-4 - Entrance Concept** and **3-5 - Parking Concept**, respectively. The final plans for these areas would include the Project elements listed below and within the general facility footprints shown, but the layout and arrangement of the components may vary. Proposed facilities, as shown on the draft Conceptual Site Plan, are summarized in **Table 3-3 – Summary of Visitor-Serving Facilities**. Park visitors using the new recreation facilities, including trails, would be subject to Park District rules and regulations, as contained in Park District Ordinance 38 (www.ebparcs.org/ord38). Normal hours of operation would be dawn to dusk.

Visitor-serving facilities include an approximately 100-car paved parking lot occupying about 1 acre of land, and an approximately 1-acre grassed open-use recreation area available for use by visitors, and to serve as a visual buffer between the Tuibun Trail and Patterson Ranch Road. The open use area would initially be used as interim parking and a restoration staging area, and may also be used for staging Park-related operations and maintenance activities such as tractor mowing, grazing, mosquito abatement, or overflow parking during special events. Visitor-serving facilities also include a new restroom facility with water and flush toilets, potable water, wildlife overlook future picnic area, interpretive elements, and new entry kiosk. Bus and bicycle parking would also be provided. A new Park entry sign, landscape plantings, and fencing would be installed at the Park entry. No park lighting is proposed other than security lights in the Farm Yard area.

The proposed parking lot and picnic facilities are located approximately 150 and 100 feet away (respectively) from the edge of the Patterson Slough Riparian Corridor. These areas would be screened from the Slough by crating low mounds (2 to 4 feet high), landscaped with native trees and shrubs.

Pedestrian and bicycle improvements would be provided within the Project area on the west side of the intersection of Paseo Padre Parkway and Patterson Ranch Road. These improvements would be constructed in cooperation with the City of Fremont, and could include accessible curb ramps, striping, signage, and traffic calming measures, and a sidewalk or path on the south side of Patterson Ranch Road to connect the existing Bay Trail to a proposed Farm Stand area. Utilities to serve the Visitor Center, including water, electrical and sanitary service may be upgraded or replaced within or adjacent to the existing road and trail.

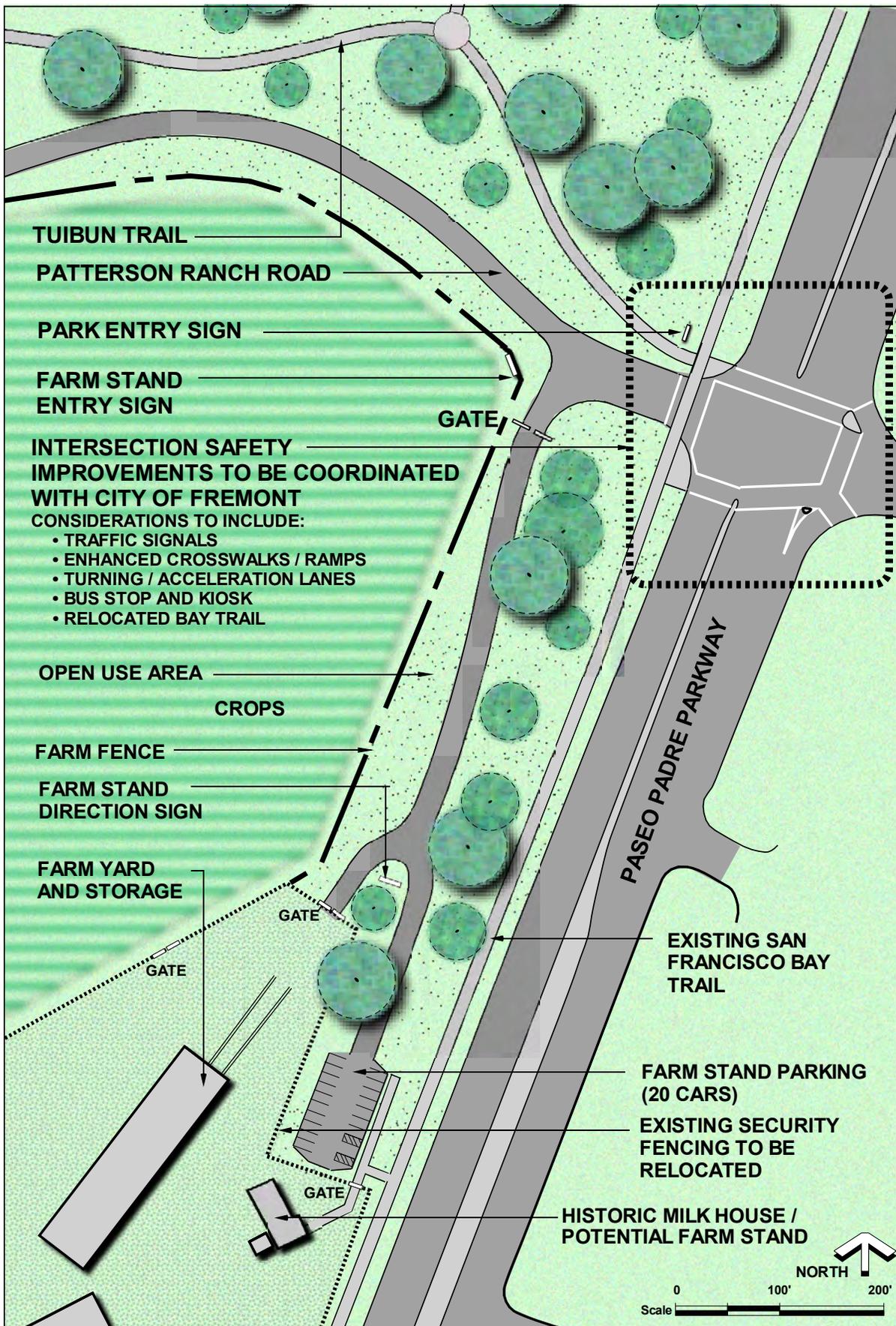


FIGURE 3-4
ENTRANCE CONCEPT

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

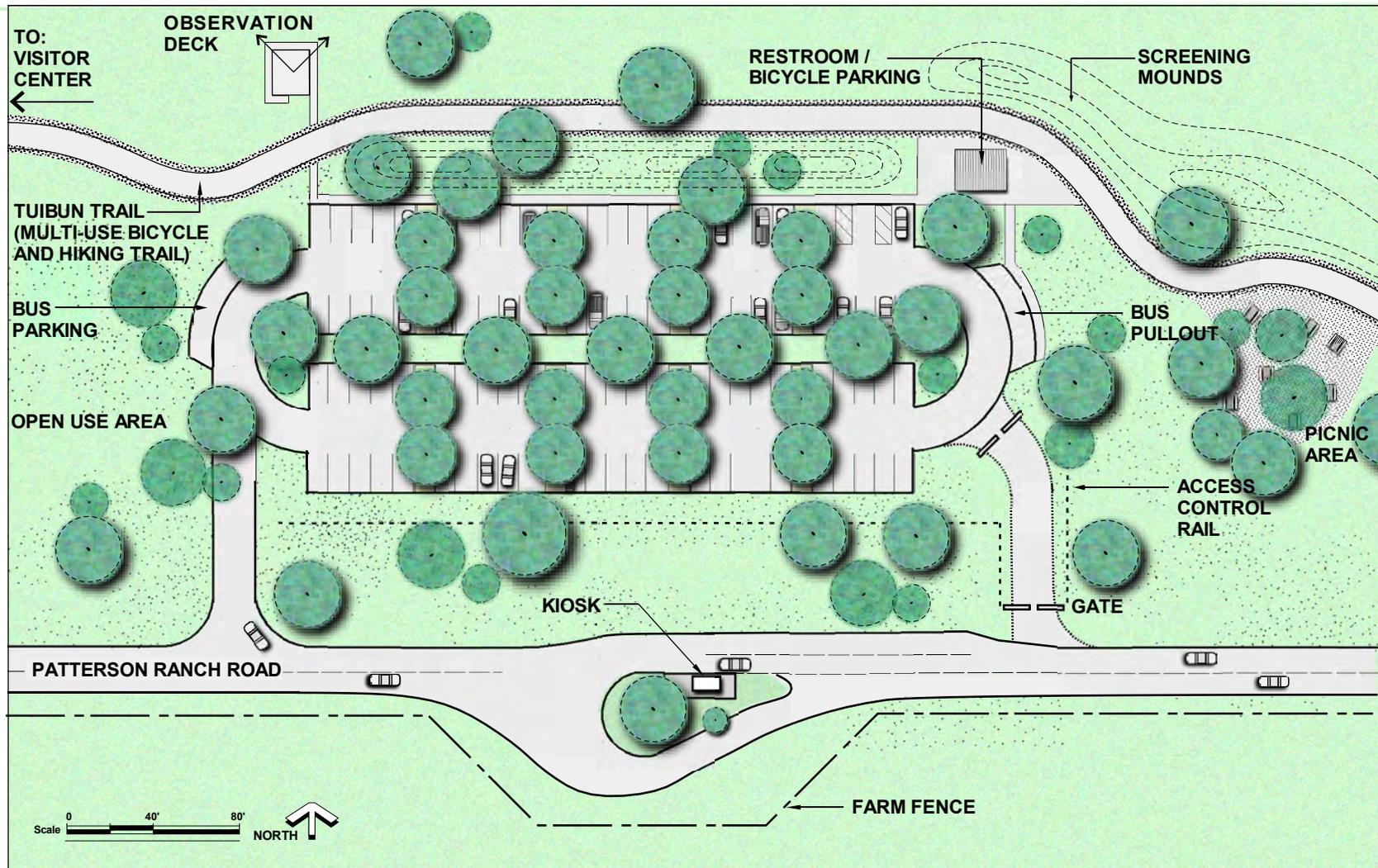


FIGURE 3-5
PARKING CONCEPT
 COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

TABLE 3-3: SUMMARY OF VISITOR-SERVING FACILITIES

1.	100-car parking lot with bus parking (+/- 1 acre)
2.	Open use area (+/- 1 acre)
3.	Restroom with flush toilets and sinks / drinking fountains with domestic water
4.	Picnic area* (+/- 1/2 acre) and other Site Furnishings <ul style="list-style-type: none"> • Up to 12 tables • Up to 5 BBQ facilities
5.	Kiosk/ticket booth with vehicle pullout
6.	Up to 10 interpretive panels
7.	Up to six wildlife observation platforms (Figure 3-8) with some interpretive panels in Natural and Recreational Units
8.	Fencing <ul style="list-style-type: none"> • 6' deer or orchard fencing around agricultural fields Two-rail fencing around front of parking and picnic areas • 4' wire field fence around Visitor Serving Facilities, Farm Yard, and portions of Ardenwood Boulevard and Paseo Padre Parkway – Bay Trail • 4' straight wire field fencing separating trails from restoration and enhancement areas. These areas would also have “Stay on Trail” signs and “Habitat Restoration – Keep Out” signs • 6' security fence around portions of Farm Yard buildings
9.	20-car parking lot in Farm Yard Area
10.	Preservation and possible (future) adaptive reuse of historic Milk House building in Farm Yard area
11.	Possible new Farm Stand designed to 1930s architecture and using materials salvaged from on-site sources
12.	Domestic water, sewer, other utilities within Project Area and extension or utility upgrades to Visitor Center
13.	Bus turnout and bus shelter along Paseo Padre Parkway, south of Patterson Ranch Road intersection
14.	Approximately 4 miles of new, improved or relocated paved multi-use trail and 0.5 miles unpaved foot trails

** No group picnic area provided and no picnic area reservations would be taken.*

Parking

The Project Plan calls for reconfiguring and relocating existing vehicle parking within the Project area and immediately adjacent areas of Coyote Hills Regional Park, including new parking at a 100-car paved parking lot on the north side of Patterson Ranch Road located approximately 1,000 feet west of the Paseo Padre intersection. Additional overflow/event parking will also be provided on an adjacent upland area. The open use grassy area could potentially be used for up to 100 vehicles for overflow parking during special events.

3. Public Access Trail Construction and Operation

Approximately 4 miles of new, improved and relocated trails are planned for the Park Expansion Project area, with a continuous north-south multi-use trail that traverses the entire area, including the proposed Oak Trail, Patterson Slough Trail (utilizing an easement to connect to Ardenwood Boulevard), Harvest Way Trail (west of the farm lands), and Tule Trail segments (in the ACFCWCD southern area). The trail system would provide connections to the San Francisco Bay Trail along Paseo Padre Parkway and Ardenwood Boulevard, and to existing trails within the adjacent Regional Park (**Figure 3-6 –Trail Plan** and **Table 3-5 -Trail Summary**).

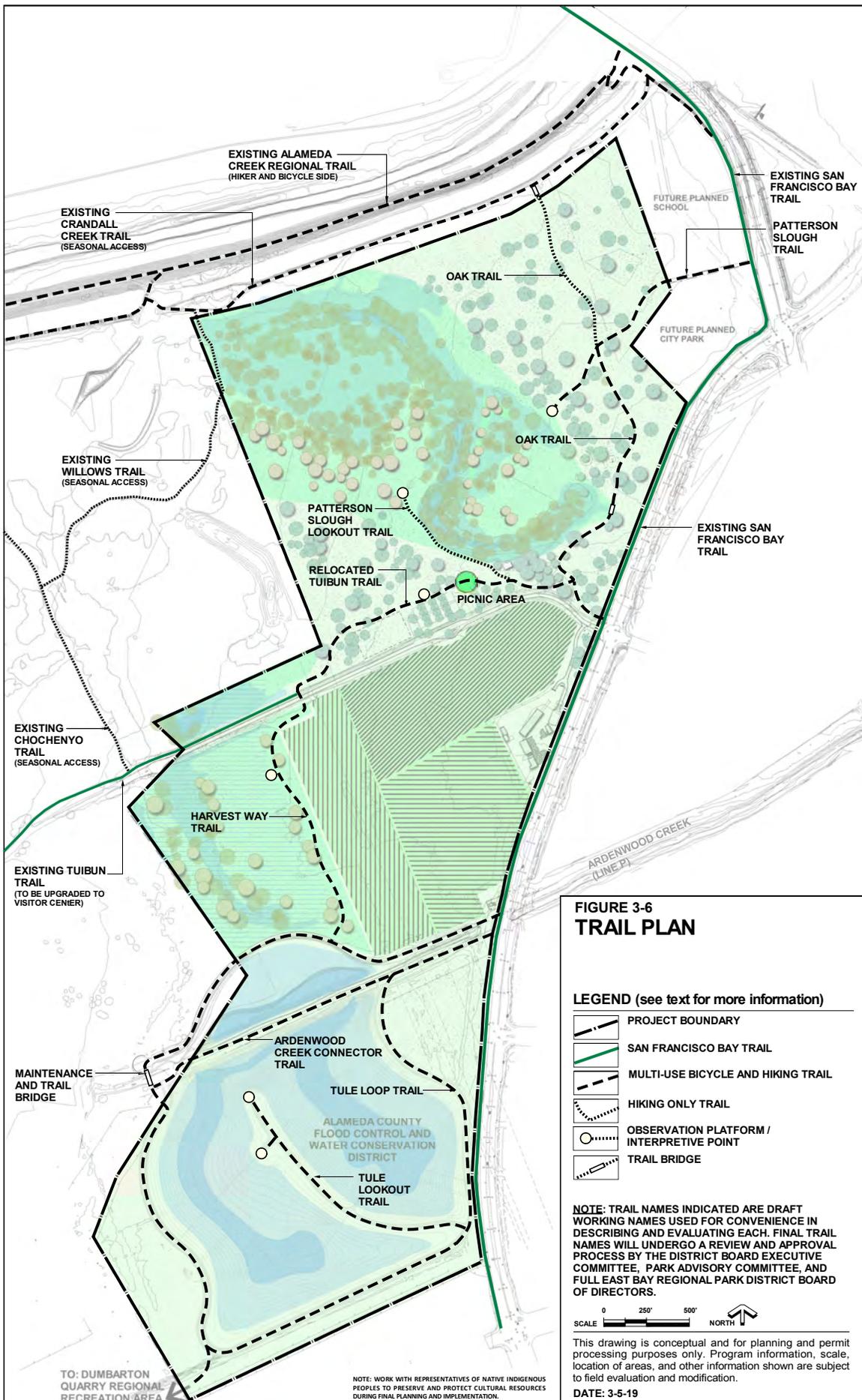
Three types of trails are planned: 1) multi-use bicycle and hiking trails (**Figure 3-7A**); 2) natural surface hiking trails (**Figure 3-7B**); and 3) improved flood control maintenance access roads to be used for trails in the Southern Wetlands Unit (**Figure 3-7C**). The ACFCWCD maintenance roads would also be used for Park maintenance activities and for mosquito control access, in addition to being proposed for multi-use trail usage.

The natural surface foot trails (approximately 0.5 miles total) may be 6 to 8 feet wide, with minimal improvements, and designated for pedestrian use only (no bicycles allowed). Portions of these pedestrian trails may not be fully accessible during periods of heavy rain due to soft soils and/or ponded/flooded conditions. Some foot trails in non-wetland areas may be elevated up to 6 to 8 inches above grade with aggregate base or gravel, and constructed with small diameter culverts or other drainage crossing structures, such as puncheon footbridges, or drainage lenses. Pedestrian-only trails are planned within the more sensitive portions of the Natural Units. The Patterson Slough Lookout Trail is located on an existing dirt farm road with the wildlife observation platform located in the former and now demolished farm worker housing area, as shown on **Figure 3-6 –Trail Plan**. **Figure 3-8** shows the envisioned wildlife observation platforms. Some trails including the Patterson Slough lookout spur may be subject to seasonal closure.

TABLE 3-4: TRAIL SUMMARY

Working Trail Name and Key Attributes	Multi-Use Trail (miles)	Foot Trail (miles)
Willows Trail, including minor repair and elevation		0.05 (existing)
Crandall Creek Trail		0.05 (existing)
Oak Trail	0.35	0.2
Patterson Slough Trail	0.30	
Patterson Slough Lookout Trail		0.15
Tuibun Trail	0.40 (relocated)	
Tuibun Visitor Center Trail improvements, including widening and elevation	1.1 (existing)*	
Harvest Way Trail	0.30	
Tule Loop Trail, including connection to new Dumbarton Quarry Regional Recreation Area	1.60	
Ardenwood Creek Connector, including 80' pedestrian/vehicular bridge	0.40	
Tule Lookout Trail	0.30	
Total	3.65*	0.45

** Total does not include 1.1 miles of proposed Tuibun Trail improvement west of the Park Expansion Project Area.*



**FIGURE 3-6
TRAIL PLAN**

LEGEND (see text for more information)

- PROJECT BOUNDARY
- SAN FRANCISCO BAY TRAIL
- MULTI-USE BICYCLE AND HIKING TRAIL
- HIKING ONLY TRAIL
- OBSERVATION PLATFORM / INTERPRETIVE POINT
- TRAIL BRIDGE

NOTE: TRAIL NAMES INDICATED ARE DRAFT WORKING NAMES USED FOR CONVENIENCE IN DESCRIBING AND EVALUATING EACH. FINAL TRAIL NAMES WILL UNDERGO A REVIEW AND APPROVAL PROCESS BY THE DISTRICT BOARD EXECUTIVE COMMITTEE, PARK ADVISORY COMMITTEE, AND FULL EAST BAY REGIONAL PARK DISTRICT BOARD OF DIRECTORS.



This drawing is conceptual and for planning and permit processing purposes only. Program information, scale, location of areas, and other information shown are subject to field evaluation and modification.

DATE: 3-5-19

TO: DUMBARTON QUARRY REGIONAL RECREATION AREA

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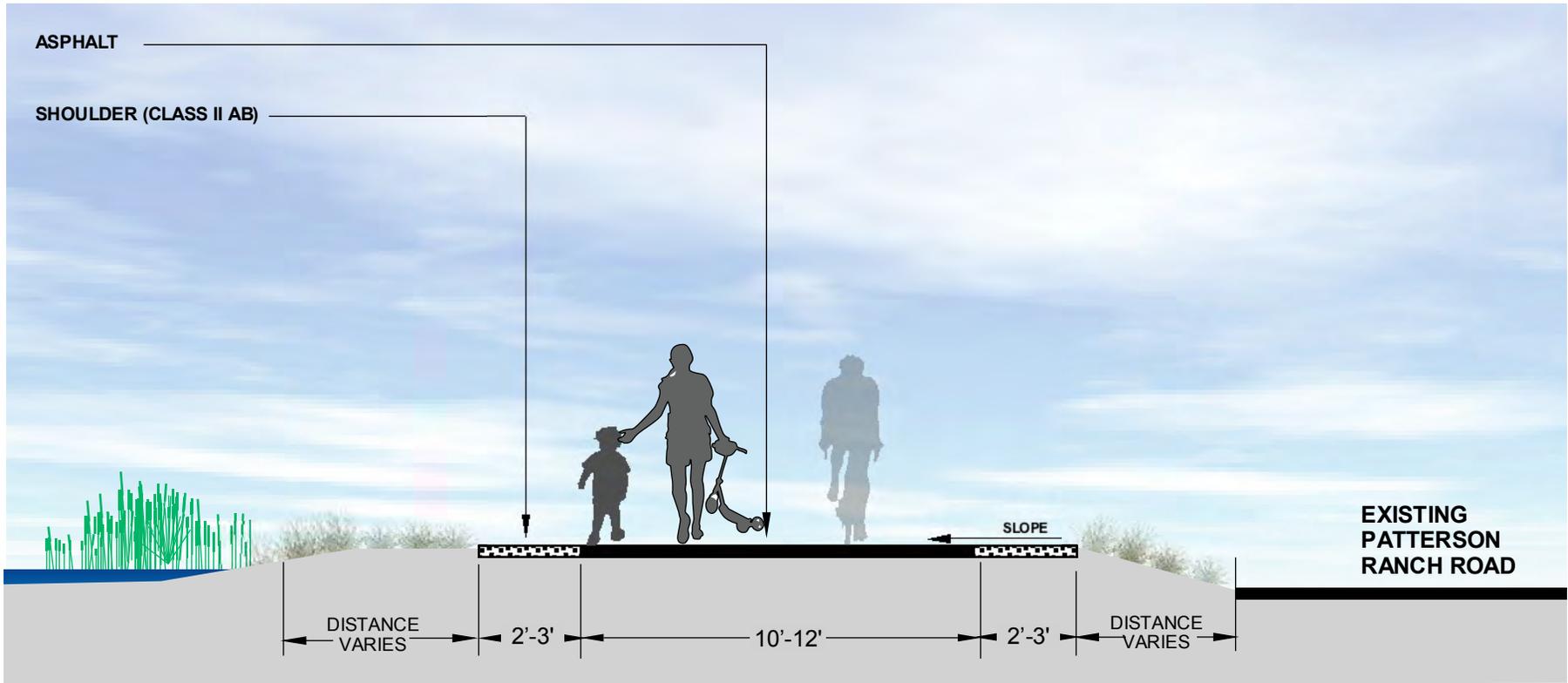


FIGURE 3-7A
SECTION: MULTI-USE BICYCLE AND HIKING TRAIL

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

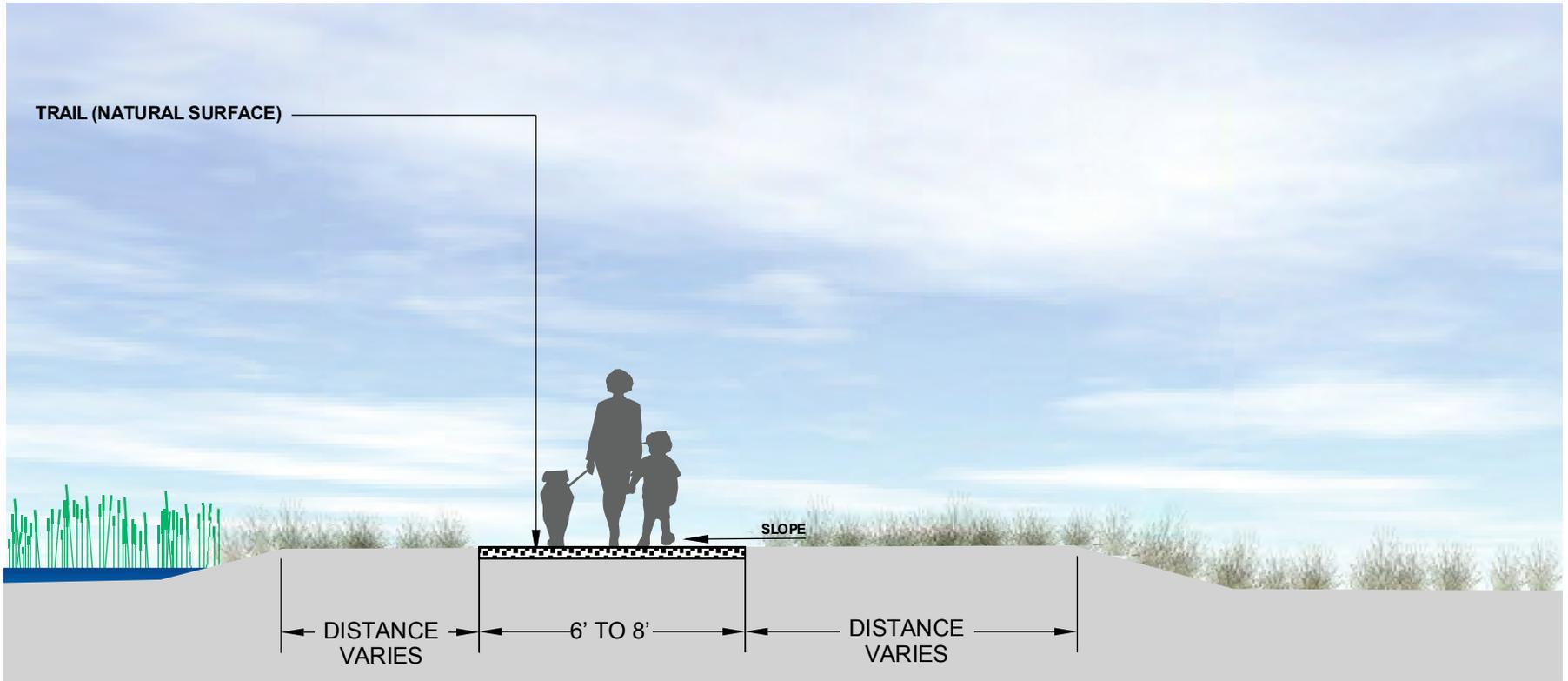


FIGURE 3-7B

SECTION: HIKING TRAIL

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

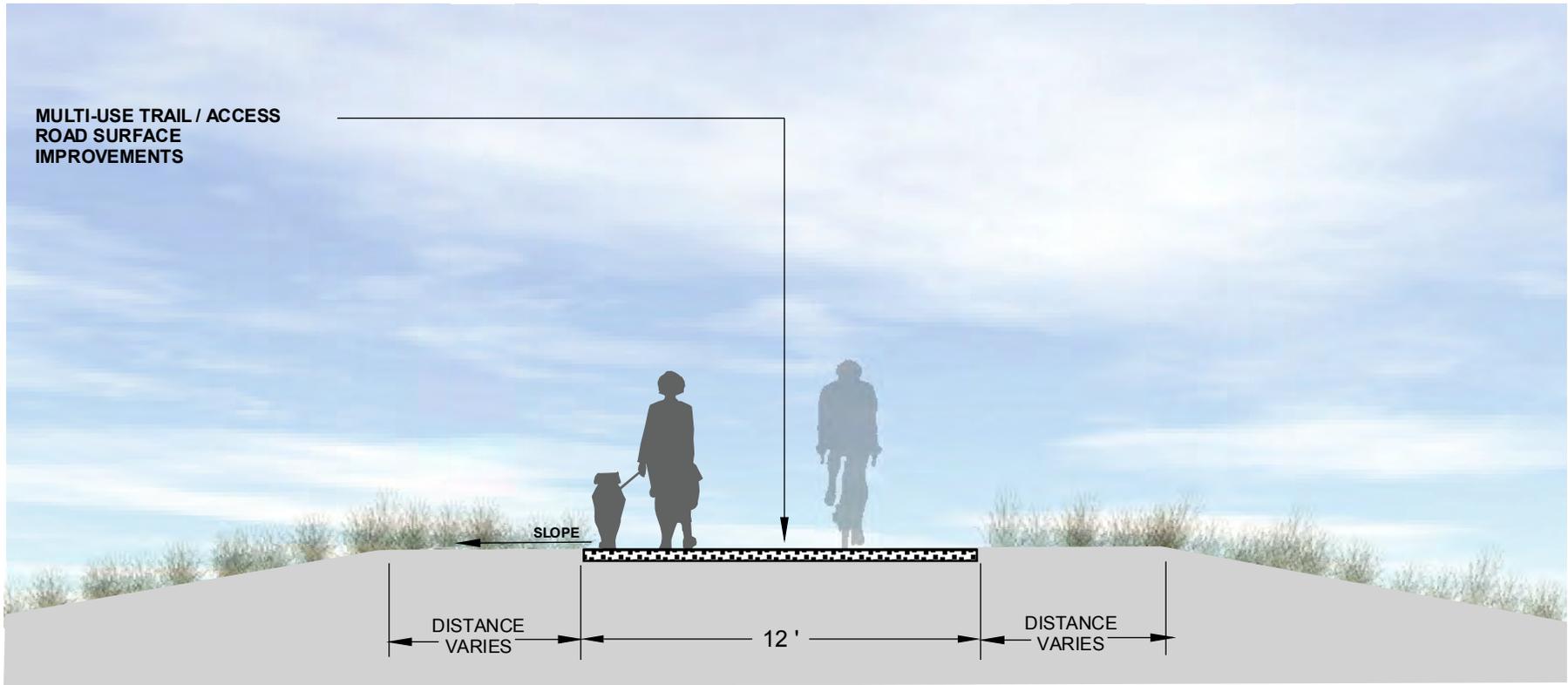


FIGURE 3-7C
SECTION: SOUTHERN WETLANDS
COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

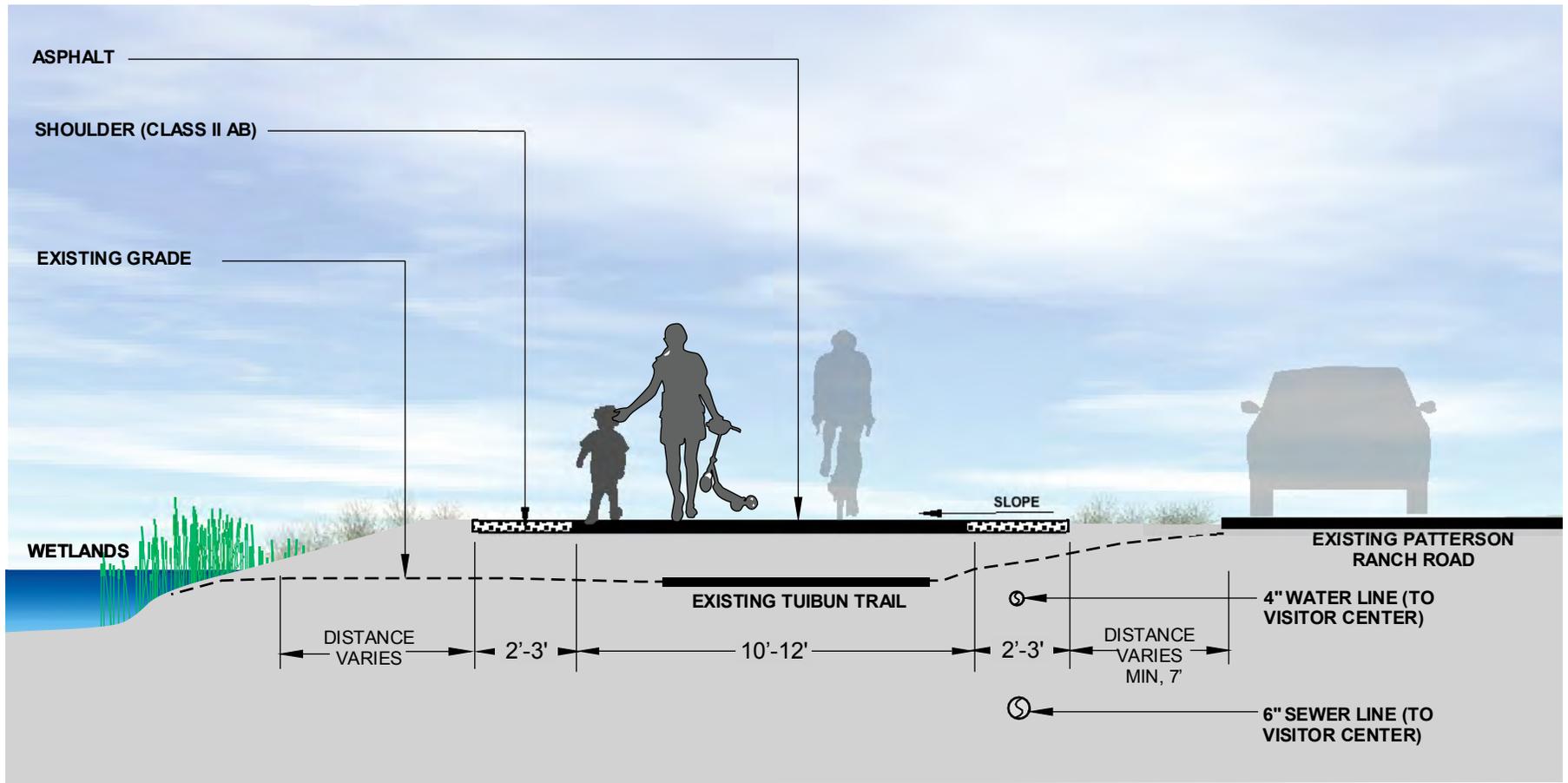


FIGURE 3-7D

SECTION: TUIBUN TRAIL TO VISITOR CENTER

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

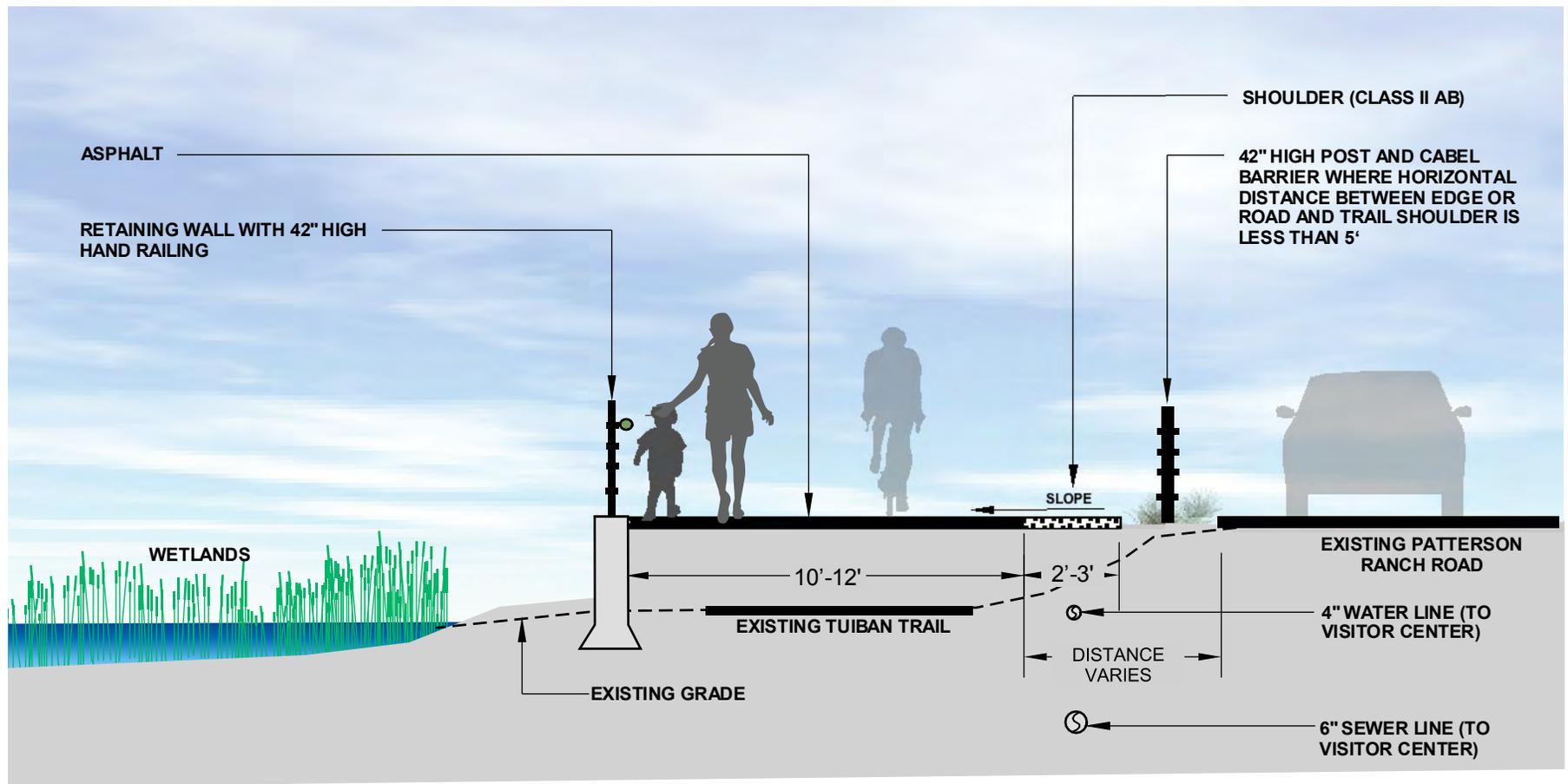


FIGURE 3-7E

SECTION: TUIBUN TRAIL TO VISITOR CENTER

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

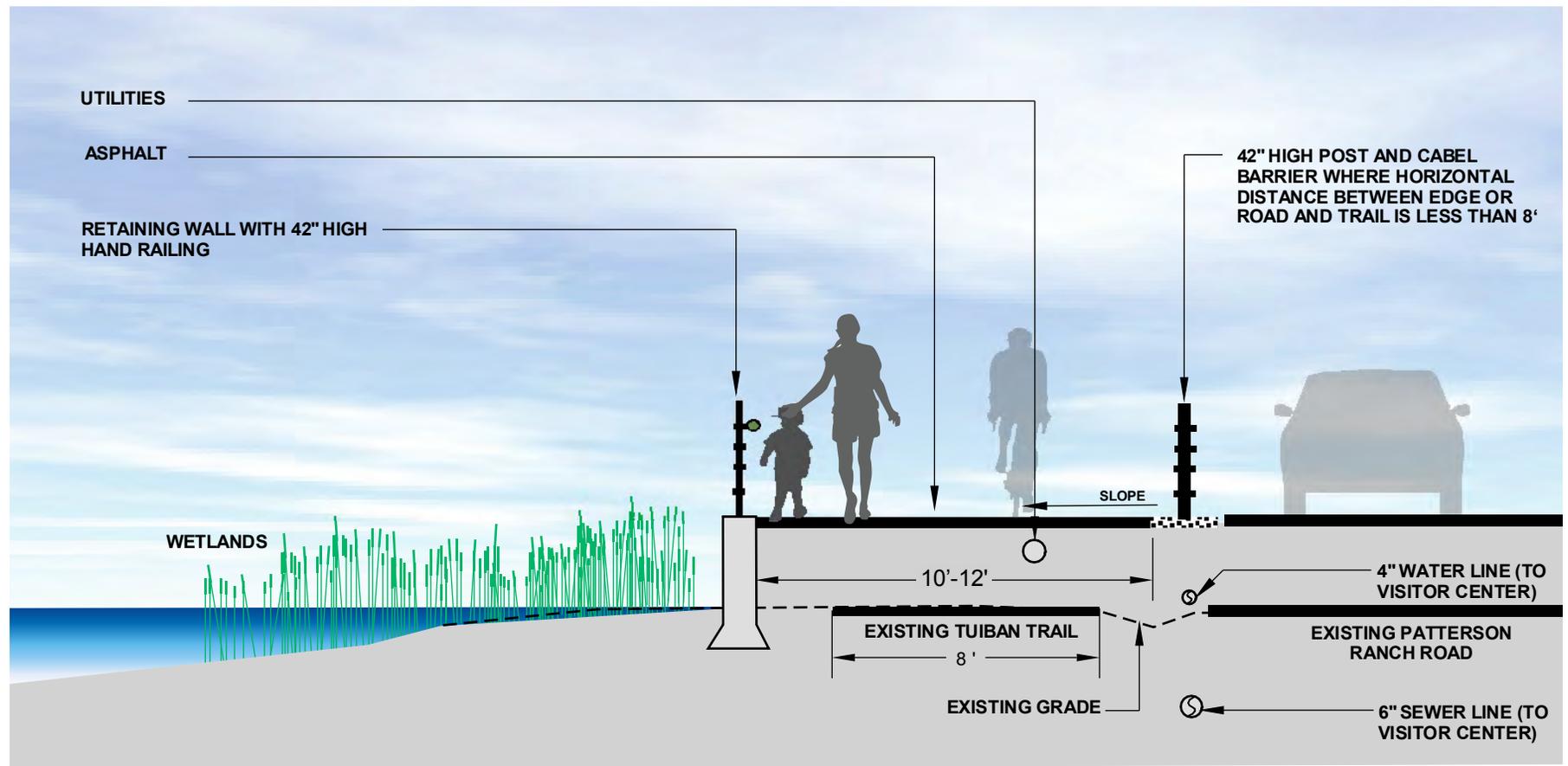
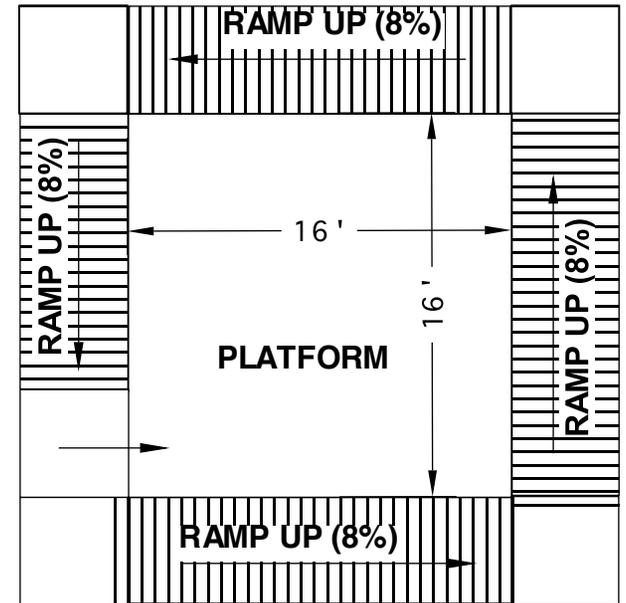
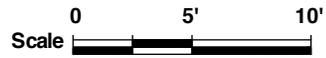


FIGURE 3-7F
SECTION: TUIBAN TRAIL TO VISITOR CENTER
COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT



ELEVATION



PLAN



FIGURE 3-8

OBSERVATION PLATFORM

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

The multi-use trails should be fully improved with a 10-foot to 12-foot paved width, designed for all weather use, fully accessible and compliant with Americans with Disabilities Act (ADA). They could have 2- to 3-foot-wide soft, stabilized fine-aggregate or gravel shoulders on both sides of the pathway. The maintenance access roads in the Southern Wetlands Natural Unit would require minimal public access improvements, such as gravel surfacing, signage, and benches. Bicyclists will be permitted on these multi-use trails. Some sections of the Southern Wetland Natural Unit may be paved with asphalt concrete where regional trail connections pass through the area.

The planned trails include approximately 0.4 miles of new natural surface hiking trails, and approximately 3.5 miles of new multi-use trails. Approximately 1 mile of improvements to the existing Tuibun Trail west of the Project Area, and approximately 0.2 miles of existing foot paths requiring minor maintenance and repair are also included in the Project.

Trail Connections

The proposed trail system includes connections to the San Francisco Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway, a new connection to the existing Crandall Creek Trail (along the south side of the Alameda Creek Flood Control Channel), providing a new bridge between the Crandall Creek Trail and DUST Trail, improving the Tuibun Trail to the Visitor Center and providing a link to camping opportunities at the future Area Dumbarton Quarry Regional Recreation Area (former Dumbarton Quarry), near and west of the southern end of the Project site. The proposed Trail Plan would also facilitate connections to the City of Fremont planned trails, including the Dumbarton Bridge to Quarry Park Trail along Quarry Road, to the south of the Project area. In addition, maintenance access roads in the southern part of the Project Area would be improved to form a loop trail system around the mitigation wetlands and along Ardenwood Creek, with wildlife observation platforms on a spur near the center of this Unit. Portions of Patterson Slough would be accessible to Park staff, researchers, occasional visitors on guided tours, and mosquito and vector control technicians. In addition to habitat restoration, a multi-use trail would be provided on the east side of Patterson Slough, connecting to the Bay Trail along Ardenwood Boulevard. This trail connection would also provide an opportunity to connect to the planned school and community park east of the Expansion area.

The existing Tuibun Trail, currently located on the immediate north side of Patterson Ranch Road, would be relocated to the north side of the new parking lot, and repaved or rebuilt in other areas. Since the Tuibun Trail is substandard due to trail width, elevation, and experiences seasonal closure due to flooding/ponding, it would be improved to a consistent standard to facilitate increased all season use to the existing Visitor Center, a distance of about 1.1 miles. Fill placement for trail elevation and upgrading in areas adjacent to wetlands along Patterson Ranch Road and the existing Tuibun Trail would use retaining walls or other structures placed at the edge of the existing trail and backfilling within the wall structures to elevate the trail section (see **Figure 3-7D, 3-7E, 3-7F**). Boardwalk segments may be constructed in some areas. These would be designed to clear-span any low, persistently wet areas within or near the existing trail footprint where trail width and elevation improvements cannot be achieved by use of low retaining walls. Helical piers, pin piers, or other innovative foundation structures would also be used to support any needed boardwalk segments and minimize ground disturbance. Low areas of Patterson Ranch Road that are subject to ponding would also be elevated within the existing roadway footprint, and utility upgrades would be made from Paseo Padre Parkway to the Visitor Center.

Wildlife Observation Platform

Public access features such as wildlife observation platforms (**Figure 3-8**) or overlooks would be at grade or placed on fill in non-wetland areas, or on elevated decks with ADA compliant ramps. The wildlife observation platforms would use wood or composite materials, be 15 to 25 feet in length and

width, and elevated 5 to 8 feet above adjacent grade on surface placed concrete pier blocks or pin piers. This would minimize soil disturbance and potential damage to any below-ground cultural resources. The wildlife observation platforms would be placed a minimum of 30 feet from the edge of Patterson Slough, with installation of fencing and native landscaping to provide physical and visual barriers and screening, in voluntary compliance with the City of Fremont Watercourse (stream) setback protection ordinance.

Alameda Creek Bicycle/Pedestrian Bridge

Currently, the existing San Francisco Bay Trail runs along Union City Boulevard in Union City and crosses Alameda Creek to Fremont via the 550-foot-long Ardenwood Boulevard vehicular bridge, and continues south along Ardenwood Boulevard and Paseo Padre Parkway past the south end of the Park Expansion area. There are currently no designated bicycle lanes on the bridge, with a 5-foot-wide sidewalk on the east side of the bridge. Earthen ramps are provided under the bridge on the north and south ends to allow pedestrian access to the bridge sidewalk from the west side. One alternative for crossing of Alameda Creek and to further improve the Bay Trail and bicycle commuter access that may be constructed as part of the Proposed Project, or by/or in cooperation with another local government entity, is retrofitting the existing bridge with a cantilevered pedestrian/bicycle lane on its west side. Pending further structural evaluation of the existing bridge, this could be accomplished for instance by attaching the cantilever beams and other structures to the existing bridge piers, with no new in-channel or channel bottom fill structures requiring placement of new piers within Waters of the US, or wetland areas. The bottom of the cantilever structure would match the bottom cord elevation of the existing bridge to avoid flood flow obstruction. In addition to the cantilever bridge structure, approach ramps and modifications to the existing Alameda Creek channel levee top and Crandall Creek levee system would connect the new cantilever bridge pathway to the existing westbound and eastbound Alameda Creek Trail and the Bay Trail. As noted above, the Alameda Creek Trail in this area ramps down and under the Ardenwood Boulevard Bridge, and the new trail ramp structures would be designed to accommodate this route, including on the north side and on the south side, where the existing levee top is lower in elevation.

4. Cultural Resources Management

Construction of public access and visitor-serving facilities would be designed to minimize excavation to the first several inches associated with clearing and grubbing activities. Most facilities, such as the parking lot, restrooms, and multi-use trails would involve fill importation and placement in non-wetland areas, not excavation. Elevated structures, such as observation platforms, wall footings, and short boardwalk segments along the improved Tuibun Trail would be founded on concrete foundation blocks or pin piers to minimize site and subsurface disturbance.

Trenching for new utility installation and utility up-roads to the Visitor Center, would be to a typical depth of 3 to 4 feet, and a maximum depth of 6 to 7 feet. Most utilities would be located within existing roadway fill. Shallow 1- to 2-foot depressions would be excavated to create seasonal wetlands. Work involving excavation that could potentially impact cultural resources would be carefully conducted under the observation of a qualified Cultural Resources Monitor and, where needed, a representative of the Ohlone people, to avoid or minimize possible disturbance of buried cultural resources, and to initiate appropriate management actions if buried artifacts or human remains are uncovered.

There are two structures within the Project area that are eligible for listing on the California Register of Historic Structures: 1) the Farm Labor Contractors Residence located immediately adjacent to the upper portion of Patterson Slough, and 2) the Milk House building in the Patterson Ranch Farm Yard area, southwest of the intersection of Patterson Ranch Road and Paseo Padre Parkway. (Please see **Park Development Plan, Figures 3-3A and 3-3B** for historic building locations).

The Farm Labor Contractors Residence is in overall fair to poor condition. The framing and foundation are in fair condition, but the exterior siding, roofing, flooring, windows, doors, interior walls and fixtures are in poor to very poor condition. Removal of the Farm Labor Contractors Residence is proposed because it is located immediately adjacent to willow-lined upper Patterson Slough in an area of high biological and cultural resources sensitivity. Because restoring and rehabilitating, or moving the building by elevating it on blocks and wheels (to relocate it) may result in damages to these resources, this structure would be carefully dismantled and materials salvaged to be available for reuse as an interpretive exhibit, farm stand or other display that reflects the structure's historic context.

The Milk House building is in overall good condition and would be preserved in place. The Milk House building is being considered over a longer period for architectural restoration or adaptive re-use such as a possible farm produce stand or other compatible Park supporting uses. In the interim it would be protected from deterioration and weather damage as part of this Project. For architectural restoration or adaptive re-use, improvements would consist primarily of interior renovation, but also would include installation of utilities such as electricity and domestic water. Improvements to historic buildings would be made consistent with the U.S. Department of the Interior, National Park Service *Historic Preservation Standards and Guidelines*. Farm Yard area improvements in this culturally resource-sensitive area would include 1 to 2 feet of fill placement needed for constructing an approximately 20-car parking area for Farm Stand visitors, fencing with driven fence posts to separate the Milk House from the storage and shop buildings that would continue to be used by the Farm operator and Park District maintenance staff, and landscape and entry area improvements, and a new Park Entry sign. All of these construction activities would have a Cultural Resource Monitor present.

5. Agricultural Land Uses and Associated Activities

The historic Patterson Ranch farm fields south of Patterson Ranch Road and immediately west of Paseo Padre Parkway would continue to be used for agriculture, and are designated as the Historic Patterson Ranch Farm and Farm Yard Agricultural Unit in the LUPA. Small-scale and local agricultural crop production by a Farm lessee would focus on use of Climate Smart farming practices and may provide local organic produce for sale at the historic Farm Yard. Climate Smart agriculture includes actions such as addition of compost to fields to facilitate carbon sequestration, low levels of tillage, and careful and efficient management of crop residues, fertilizers, organic pesticides, and irrigation water. Some of these uses may be conducted as part of a demonstration or pilot study with an environmental education/interpretive component.

In addition to farming in the Agricultural Unit, mowing for hay production and grazing would be allowable uses in the Patterson Slough, oak savanna and grasslands and the Western Wetlands areas; but not within seasonal wetlands, willow sausal or mixed riparian forest areas.

Two modern metal storage buildings would remain onsite and would continue to be used for supporting agricultural or Park operation-related activities. Other farm use-related improvements proposed for this area may include extension of utilities to serve the complex, including a new 1" domestic water line to serve the building, sewer, electricity/gas, and construction of a 20-vehicle parking area occupying about 1/3 acre of land, to serve the Farm Stand. Existing fencing may be modified to improve site management and security and enhance the visual character of the area. New deer fencing would also be installed in the agricultural area to minimize deer browse damage.

6. Surface Water and Groundwater Management

As an important element of the Project, the Park District would continue to coordinate and cooperate with its partner local agencies in protecting, monitoring, and managing the surface water

and groundwater resources within Coyote Hills Regional Park, including within the Park Expansion area. The partner agencies and areas of cooperative and shared water management responsibility include:

- Alameda County Flood Control and Water Conservation District (ACFCWCD) – Flood control and water quality management of Line P/Ardenwood Creek and Line K/Crandall Creek
- Alameda County Water District (ACWD) – Groundwater management, including monitoring and management of shallow zone salinity, and agricultural and habitat restoration irrigation wells
- Alameda County Mosquito Abatement District (ACMAD) – Management of mosquitoes and other potential disease vectors in ponded areas, especially along and within Patterson Slough and west of the Project area
- Alameda County Environmental Health (ACEH) – Water quality of domestic water wells and onsite wastewater disposal systems regulation
- Alameda County Resource Management District (ARCD) – Assistance in management of agricultural operations, including soil and water quality issues associated with farming, grazing, and habitat restoration
- City of Fremont (City) Department of Engineering and Planning – Management of stormwater runoff, grading and erosion control, hazardous materials/waste management, and flood plain regulation

General Project activities include facilitation of access to surface water bodies for monitoring and management, as well as providing continuing access to monitoring wells and irrigation wells, and sharing monitoring information collected by the Park District Staff.

Specific Project activities described in more detail below include:

- ACFCWCD Phase 1 Flood Control and Wetlands Mitigation Area (WMA) Project
- Stormwater control facilities, including parking lot bioswales and rain gardens
- Abandoned well location and destruction
- Abandoned septic tank location and destruction
- Low level pesticide residue evaluation and as-needed remediation and removal

Southern Wetlands Natural Unit-Phase 1 Flood Control and Wetland Mitigation Project

The ACFCWCD Project includes constructing a Flood Control and Wetlands/Habitat Mitigation and Public Access component covering approximately 50 acres that is located south of Line P/Ardenwood Creek, within the Southern Wetlands Natural Unit.

The Park District will continue to coordinate this work with ACFCWCD, who would be the lead agency responsible for this construction and operation. This work is a continuation of Phase I of the ACFCWCD Flood Control Zone 5 Line P Project. The Line P Phase 1 Project was completed in the fall of 2017 and involved making channel flood flow conveyance improvements (channel widening and deepening to original design grades) to Ardenwood Creek, from upstream beginning at Tupelo Street to approximately 2,200 feet downstream of Paseo Padre Parkway west of the Park Expansion

area. Phase 2 of the Project involves making channel conveyance improvements along Line P through the existing Coyote Hills Regional Park “J-Pond” area, to its outlet at the tide gate discharge culverts in the Alameda Creek south levee, north of the Visitor Center. Phase 2 is a separate project and is not addressed in this CEQA document.

The Phase I continuation work involves grading two, 3- to 4-foot-deep off-channel basins that will be connected to Ardenwood Creek via two culvert crossing structures for inlet and outlet flow controls. Each crossing consists of four 48” diameter reinforced concrete pipes, with sluice gate control at one of the four pipe barrels at the outlet structure. The two basins will occupy about 30 acres, as measured at their rim elevations. The basins will serve as temporary floodwater detention structures during periods of high flow in Line P/Ardenwood Creek.

The basins will be planted and seeded using a mix of native seasonal wetlands and emergent marsh species, including species that are saline-alkali tolerant. The created wetlands will provide mitigation credits for other ACFCWCD flood control and channel maintenance projects and operations in Zone 5, including maintenance projects along Alameda Creek. Some of the graded earthen material will be relocated within the 50-acre parcel to create oak savanna uplands, with a riparian planting zone along Ardenwood Creek, and to create elevated areas for flood control/maintenance roads. Some of the excess cut not used on site may be off-hauled to an approved disposal location. The Flood Control and Wetlands Habitat Mitigation project is shown conceptually on **Figures 3-3A and 3-3B, Park Development Plan.**

The maintenance roads would be available to the Park District and ACFCWCD to improve, maintain, and operate as multi-use trails. This mitigation area would be improved and maintained over an initial 7- to 10-year period, during which it will be operated and managed by the ACFCWCD as a Wetlands / Habitat Mitigation Bank. Following successful establishment of the Mitigation Bank, including its created wetlands and enhanced habitat, and its demonstrated success in being self-sustaining and meeting all Mitigation Bank establishment criteria, and after all the Mitigation Bank credits have been used, the area would be turned back over to the Park District for full integration and management as part of Coyote Hills Regional Park.

Project Area Stormwater Control Facilities

Construction of the Open Use area and 100-car parking lot, restroom, and picnic area facilities in the Ranch Road Recreation Unit would also include the grading of bioswales (broad-bottomed shallow and vegetated drainageways) and rain garden facilities to capture and treat stormwater runoff prior to release to the west side of the Patterson Slough mixed riparian/willow restoration area. Grading volumes are estimated to be 200 to 300 cubic yards of earthwork with maximum cut depths of 2 feet below existing grade. All stormwater runoff design and construction work would be completed consistent with City of Fremont Municipal Code section 18.210.110, “Development design requirements (stormwater)”.

Destruction of Abandoned Wells

There are eight known or suspected abandoned and non-functioning wells within the Park Expansion area, or immediately adjacent to it. Some of the abandoned wells have no surface infrastructure, such as a standpipe or pump, and are difficult to locate in the field. Their approximate locations are based on ACWD records. As part of final engineering, and during construction and associated construction management, the Park District would coordinate with ACWD to confirm the location of abandoned wells, identify any previously unknown abandoned wells, and develop and implement plans to destroy these abandoned wells following applicable ACWD permitting

regulations and destruction guidelines. This would involve pulling well pumps and casings and any aboveground stand pipes and grouting the wells closed.

Abandon and Destroy Septic Tanks and Leachfields

The historic Contractors Farm House and the now demolished Farm Labor Housing buildings were located in rural, unincorporated Alameda County when they were built. They had septic tanks and leachfield wastewater disposal systems. Per Alameda County Onsite Wastewater Treatment System Code, Section 9, these abandoned systems would be field-located, and if found, destroyed. This would involve removing the septic tank lid, pumping the tank chambers, perforating the tank bottom, and backfilling the tank with pea gravel or drain rock and topsoiling. Leach lines would not be removed. This work would be done under a County-issued permit.

Low-Level Residual Pesticide Contaminated Soil Remediation

Portions of the Project Area may contain surface soils with low levels of residual pesticide compounds, which are a relic from when this area was intensively farmed. Based on the results of previous testing, residual levels are such that they do not create a health risk to construction workers, Park staff, Park visitors, or nearby businesses or residences, but could have potential ecological food chain effects through uptake of soil-borne insects in wetland areas. Follow-up sampling and testing would be completed in areas where new seasonal wetlands are proposed. Depending on the findings, shallow soil excavation and removal, and transport of the soil to an approved facility permitted to accept the soil would be completed. The removed soil may be treated as a non-regulated or non-hazardous waste material.

7. Utility Upgrades and Extension

Domestic Water

Currently there is no potable water service to the Project Area. The Visitor Center is served via a 3-inch water line that crosses diagonally from Paseo Padre Parkway in the vicinity of Kaiser Avenue through the fields north of Ardenwood Creek to Patterson Ranch Road in the vicinity of the existing kiosk where it runs up the road to the Center. This system is considered unreliable and under-sized, especially for fire control purposes. The Proposed Project would include a new 6-inch water line from the ACWD water main along Paseo Padre Parkway, up the north side of Patterson Ranch Road, to the Visitor Center, a distance of about 8,000 linear feet (LF). A new 2-inch lateral water line would run to a proposed new restroom facility to the north, and to the proposed picnic area, a distance of about 1,500 to 1,600 LF from the Paseo Padre Boulevard point of connection.

A new 2-inch potable water line would also be installed within the Farm Yard parking area to serve the existing Milk House building, about 500 - 600 LF. The water lines would be in 2 to -3-foot wide by 3- to 4-foot-deep utility trenches compliant with City of Fremont and ACWD standards.

Irrigation Water

Temporary irrigation, including provision of a temporary irrigation water source and supply, storage, and irrigation distribution system, would be provided as part of the Project to aid in the establishment of native trees and shrubs within the mixed riparian and oak savanna restoration areas. Approximately 6,000 to 8,000 trees may be planted over a three- to five-year period, including live willow stake planting in the willow sausal restoration area. The planted native trees would require seasonal irrigation during a two- to three-year plant establishment period. Total annual irrigation volumes are estimated to be about 3.0 to 4.0 acre-feet of water. Tree planting would be staggered over a 3-year period, so actual annual use may be less than this.

Sources of irrigation water that might be used include either the existing farm irrigation well in the Historic Patterson Ranch Farm and Farm Yard Agricultural Unit and/or repairing and using an existing well located in northeast corner of the Patterson Slough Natural Unit, or using available reclaimed or domestic water.

Wastewater

The current wastewater system consists of a 4-inch diameter sanitary sewer force main that runs about 8,000 feet along Patterson Ranch Road from the Union Sanitary District (USD) sewer main along Paseo Padre Parkway to the Coyote Hills Regional Park Visitor Center. The wastewater system includes a lift station that is located below the Visitor Center. This wastewater system would be reconstructed within Patterson Ranch Road, upgrading to a 6-inch line with a new pump station.

A new, 2- or 3-inch diameter pressurized wastewater pipeline would be installed parallel and adjacent to the re-constructed force main to serve the restroom building in the Project Area. This is a distance of about 1,400 - 1,500 LF from the USD Paseo Padre Parkway sanitary sewer main. The restroom wastewater system would include a duplex (backup) pump station. The sewer line would also be located within a utility trench compliant with City of Fremont and applicable USD codes and standards, typically 3 feet wide and 5 feet deep along much of Patterson Ranch Road, but possibly up to 6 or 7 feet in depth near Paseo Padre Boulevard. Since the Park Expansion area is not currently within the USD service area, approval would also be needed from the Alameda County Local Agency Formation Commission (LAFCO).

Other Utilities

Other “dry” utilities that would be installed within and above the water line in the joint trench per City code would include: a) 2” gas line, b) two 4” telecommunications conduits, c) 4” electrical conduit, and d) 2” fire signal conduit. These would also run from the vicinity of Paseo Padre to the Visitor Center, with select laterals (electric service) to the proposed restroom facility.

8. Climate Change and Sea Level Rise Adaptation

There are four objectives that would be implemented in the LUPA and Park Development Plan regarding climate change adaptation:

- 1) Ensuring that existing and proposed improvements are resilient to changing climate, including sea level rise, rising ground water tables, potential soil and groundwater salinization, and increased flood risk to infrastructure.
- 2) Ensuring that District activities occurring within the expansion plan area, consistent with the overall Coyote Hills Regional Park, are appropriate management actions to reduce Park contributions of greenhouse gases and other climate changing actions, and proactively taking actions that trap or sequester atmospheric carbon.
- 3) Providing opportunities to educate Park visitors about climate change, as well as cooperating with climate change scientists to make parklands available for research and demonstration projects.
- 4) Providing opportunities for active transportation to, from and within the Park by constructing facilities for bicycle and pedestrian use, as well as accommodating transit where appropriate.

Site program components that address climate adaptation include Climate Smart farming activities, as well as the proposed program of riparian and oak savanna tree planting for carbon fixing or carbon sequestration. Other opportunities include planning for installation of electric vehicle charging stations in the parking lot, should the Park District develop a pilot program in the future.

Climate Smart management and adaption also involves constructing facilities and improvements to elevations above those subject to flooding and ponding, as well as developing improvement and restoration plans that are cognizant of and adaptive to expected increases in shallow zone groundwater levels, increased areas of ponding/flooding and poor drainage, and potentially increased soil and water salinity and sodium levels. The plant palette would include local, native plant species that are site appropriate and tolerant plant materials capable of thriving under changing site conditions.

A proposed robust, science-based soil and surface and groundwater monitoring program would aid in climate change adaptive management decision-making. Baseline conditions were documented during the Project site investigations and would form the basis of the proposed long-term monitoring program. Smart, wireless and web-based agricultural sensors may be used to remotely monitor organic matter (soil carbon), moisture, soil oxygen, salinity, pH, and other important soil and hydrologic properties, and the record keeping and database would provide the information needed to support adaptive management decision-making.

9. Visitor-serving Facilities and Trail Grading and Disturbance

Preliminary estimates of grading, trenching and fill quantities are provided in this section. Quantities and measurements are approximate. Exact Visitor-Serving facility footprints and exact trail lengths, widths, and fill depths would be determined during future Park Design Development with some Plan elements, such as building, grading, and stormwater management, subject to review and approval by the City of Fremont. A range of lengths, widths and fill thickness was used to bracket and quantify potential disturbance areas associated with Proposed Project features, along with a range of expected fill volumes.

Construction of trails, parking areas, and visitor facilities, and installation or upgrading of utilities, would involve clearing and grubbing 2 to 3 inches of topsoil, grading, trenching and local cut or imported fill placement and compaction. Fill depths would typically not exceed 4 feet with most cuts (except utility trenches) limited to 2 feet.

Construction of visitor-serving facilities (farm yard area, picnic area, restrooms, and parking) would disturb between 141,000 and 171,000 square feet, and place between approximately 6,200 (0.15 acres) and 12,500 (0.30 acres) cubic yards of fill to a maximum depth of 4 feet. Construction of new trails and repair, re-construction, or relocation of existing trails would disturb between approximately 310,900 and 366,600 square feet (7.1 to 8.4 acres), and place between 13,000 and 20,400 cubic yards of fill to a maximum depth of 3.0 feet. Trenches for utility installation would be approximately 9,000 to 9,800 feet in length, and have a maximum depth of 6-feet. For the Project, total fill volume associated with parking, trails and visitor-serving facilities would be in the range of about 19,500 to 33,000 cubic yards. Total disturbance, if all Project Trail and Visitor-serving features were constructed at the same time, would be between approximately 452,000 sq. ft. (10.3 acres) and 537,600 sq. ft. (12.3 acres). **Tables 3-5** and **3-6** summarize fill and disturbance associated with Trails and Visitor-serving Facilities.

TABLE 3-5: VISITOR SERVING FACILITIES -DISTURBANCE AND FILL SUMMARY

Working Area Name	Feature Size (SF)	Fill Depth (ft.)	Fill Volume (CY)
1. Parking Area and Restroom	48,000 - 62,000	1.5-2.5	2,700-5,700
2. Picnic Area	18,000 - 23,000	1.0-2.0	700-1,700
3. Overflow Parking	43,000 -47,000	1.0-2.0	1,600-3,500
4. Farm Yard Parking and Road	23,000 -27,000	1.0-1.5	850-1,500
5. Other Farm Yard Use Areas	9,000 - 12,000	1.0-1.5	350--670
Total	141,000-171,000	N/A	6,200-12,500-

TABLE 3-6: TRAIL DISTURBANCE AND FILL VOLUMES

Working Trail Name	A Trail Length (LF)	B Fill Width (ft.)	C Fill Depth (ft.)	D Fill Disturbance (SF)	E Fill Volume (CY)
Willows Trail (existing foot) *1	600	7-8	0.4-.5	4,200-4,800	60-90
Crandall Creek Trail (existing foot tail with 20' bridge) *1	500	7-8	0.3-.4	3,500-4,000	40-60
Crandall Creek Trail Connector (existing foot)	1,100	11-12	1.5-2.0	12,000-13,200	680-980
Oak Trail and Patterson Slough Trail (multi-use)	2,700-2,900	17-19	1.5-2.0	46,000-55,100	2,600-4,000
Patterson Slough Overlook Spur (existing foot)	600	9-10	1.0-1.5	5,400-7,000	200-390
Patterson Slough West Spur (existing foot)	500	9-10	0.5-0.7	4,500-6,000	85-155
Tuibun Trail (relocated - multi-use) *2	2,000-2,200	17-19	2.0-2.5	35,000-40,000	2,600-3,700
Tuibun to Visitor Center Trail improvements (improved - multi-use) *3	5,300-5,500	9-10	1.5-2.0	53,000-66,000	2,950-4,900
Harvest Way Trail (multi-use)	1,600-1,800	17-19	2.5-3.0	27,200-34,200	2,500-3,800
Marsh View Loop Trail (multi-use) *4	8,500-8,900	11-12	0.3-0.4	93,500-108,000	1,050-1,600
Ardenwood Creek Connector (multi-use) *4	2,000-2,200	11-12	0.3-0.4	22,000-26,400	250-390
Tule Spur (multi-use) *4	1,600-1,800	11-12	0.3-0.4	17,600-21,600	200-320
Total	27,000-28,600	N/A	N/A	310,900-366,600	13,215-20,385

Notes:

- *1) Minor improvements to existing foot trail, including re-grading and gravel surfacing in places
- *2) Existing Tuibun Trail along Patterson Ranch Road to be relocated to the north within LUPA
- *3) Existing Tuibun Trail West to be elevated approximately 1.5 feet to 2.5 feet using fill placed between retaining walls with some boardwalk structures
- *4) Trails in Southern Wetlands to be located on Flood Control District constructed maintenance access roads. Signage and minor gravel surfacing may be required.

Restoration Grading and Disturbance

Grasslands and Oak Savanna

To facilitate the control of existing invasive weedy areas and the establishment of native grasses and forbs, and to create a more complex micro-topography for habitat diversity, oak savanna and grassland restoration would include the selective placement of 6 inches to 1 foot of clean imported soil, and 2 to 3 inches of compost. The compost addition will also facilitate carbon sequestration. Because of the large size of these restoration areas, clean soil and compost importation and placement would initially be limited to zones or strips along the Fremont Unified School District future school parcel and the City of Fremont future park parcel, paralleling Ardenwood Boulevard, as well as along the north side of the proposed parking lot, open use area, and picnic and landscaped areas, paralleling Patterson Ranch Road. The zone where imported fill/compost would initially be placed parallels Ardenwood Boulevard from approximately 250 to 700 feet wide and 2,000 to 2,500 feet long. Proposed imported clean fill in this area would range from 15,000 to 20,000 cubic yards, with proposed compost additions ranging from 8,000 to 10,000 cubic yards. The zone paralleling Patterson Ranch Road ranges in size from a width of 200 to 400 feet, and a length of 1,000 to 1,500 feet. Initial imported clean fill in this area would range from 8,000 to 10,000 cubic yards, with proposed compost additions ranging from 4,000 to 5,000 cubic yards.

The proposed grassland/oak savanna restoration work also includes selectively scraping or removing 2 or 3 inches of weed-seed laden topsoil and placement under the proposed parking lot and open use area (up to 20,000 cubic yards), and importing and placing 6 inches to 1 foot of clean suitable fill/topsoil and 2 to 3 inches of compost over the existing soil surface in grassland/oak savanna restoration areas to reduce weed competition. Total imported fill/topsoil volume is estimated to range from 30,000 to 50,000 cubic yards. Compost addition to oak savanna areas is estimated to range from 15,000 to 25,000 cubic yards.

The City of Fremont and Fremont Unified School District have expressed an interest in evaluating the possibility of a potential “land swap” with the Park District in order to form a parcel to meet State standards to construct an elementary school. The Park District has not agreed to any such deal, however, should this land swap occur, Grassland and Oak Savanna planned at the project area abutting the Project’s northeastern boundary and School/City property could shift southeast towards Paseo Padre Parkway. The acreage of restored habitat would remain unchanged. Regardless of the outcome of a potential future land swap in this area, the City and School District will be responsible for evaluating the environmental effects of developing their parcel through a separate CEQA process.

Seasonal Wetlands

Seasonal wetlands enhancement achieved by shallow (1 to 2 feet deep) excavation is proposed to occur in two areas near the east and west ends of Patterson Slough within the Patterson Slough Natural Unit, as well as within the Western Wetlands Natural Unit. Approximately 3 to 5 acres of seasonal wetland excavation and grading are proposed for these areas, resulting in cut volumes of between 5,000 and 16,000 cubic yards (each area). All seasonal wetlands excavation and creation would occur in areas that have not been identified as being Corps of Engineers Jurisdictional Wetlands. Cut soil volumes from seasonal wetlands enhancement grading would be placed to elevate

the open use area, parking lot and picnic/landscape area or placed within the Farm Yard area. Grading for habitat restoration and flood control purposes in the Southern Wetlands Natural Unit was previously discussed under the section heading 6.0 “Surface Water and Groundwater Management”.

Because of nearly ideal soils and shallow groundwater conditions, only minimal grading and disturbance would be performed to restore and enhance the willow sausal and mixed riparian forest along Patterson Slough. Invasive weed control in areas of proposed mixed riparian forest and willow sausal would be achieved by mowing, grazing, and selective herbicide application and compost placement, with eventual full control achieved by shading provided by a dense tree canopy.

4 ENVIRONMENTAL EVALUATION

This chapter consists of an evaluation of the environmental impacts of the proposed Coyote Hills Restoration and Public Access Project. In accordance with Appendix G of the CEQA Guidelines, the potential effects of the Proposed Project on the following issues are analyzed in Chapter 4 of this EIR:

- ◆ Biological Resources
- ◆ Cultural and Tribal Cultural Resources
- ◆ Transportation

The following issues were determined by the Initial Study (IS) to have no impacts, or impacts that would be less than significant with implementation of mitigation measures identified in the Initial Study, and are therefore not included in the EIR.

- ◆ Aesthetics
- ◆ Agriculture and Forest Resources
- ◆ Air Quality
- ◆ Geology and Soils
- ◆ Greenhouse Gas Emissions
- ◆ Hazards and Hazardous Materials
- ◆ Hydrology and Water Quality
- ◆ Land Use and Planning
- ◆ Mineral Resources
- ◆ Noise
- ◆ Population and Housing
- ◆ Public Services
- ◆ Recreation
- ◆ Utilities and Service Systems

Format of the Environmental Evaluation

Each section in Chapter 4 follows the same format and consists of the following subsections:

- ◆ The **Regulatory Framework** subsection contains an overview of the federal, State, and local laws and regulations applicable to each environmental review topic.
- ◆ The **Existing Conditions** subsection describes current physical conditions with regard to the environmental factor reviewed.
- ◆ The **Standards of Significance** subsection tells how an impact is determined to be significant in this EIR. Where noted, these standards are based on the CEQA Guidelines and other regulatory criteria.
- ◆ The **Impact Discussion** gives an overview of potential impacts of the Project and explains why impacts are found to be *significant, less than significant, or no impact*.

- ◆ The **Impacts and Mitigation Measures** subsection numbers and lists identified impacts and recommended measures that would mitigate each impact, where such measures are available.

Cumulative Impact Analysis

The CEQA Guidelines require consideration of the potential cumulative impacts that could result from a Proposed Project in conjunction with other projects. A cumulative impact consists of an impact created as a result of the combination of the Proposed Project evaluated in this EIR together with other current and reasonably foreseeable future projects causing related impacts. Cumulative impacts are considered for each issue separately (see 6.5 Cumulative Impacts). The following proposed, approved, or under construction projects in the vicinity of the Project site are considered in the EIR's cumulative impact analysis.

Proposed Projects

Four office buildings on Campus Court. Four office buildings on Campus Court, east of Paseo Padre Parkway and the Project site, were entitled through the Ardenwood Technology Park Planned District Amendment.² The four buildings would have a total of 809,236.5 square feet, with corporate/professional, administrative, research and development offices, and a full-service hotel. Ancillary uses could include small-scale retail and services uses including restaurants, delis, dry cleaners, health clubs, banks and small retail establishments.

Replacement of Agricultural Well on Project Site. The Park District is in the process of replacing an existing, nonfunctional agricultural well on the south side of Patterson Ranch Road with a deeper well. Although this will occur on the Project site, it is a separate project to support an existing agricultural operation that has already been initiated, and is not addressed in this CEQA document except in the analysis of cumulative projects.

Approved Projects

Coyote Hills Regional Park Visitor Center. As part of the Coyote Hills Regional Park Land Use Plan, a new and larger Visitor Center was approved in 2005 but has not yet been constructed. This Visitor Center will be located in the existing Regional Park, located adjacent to the Project site to the west. The Visitor Center structure will have a maximum of 8,700 square feet, and will include expanded parking in front of the existing Visitor Center (up to 51 additional spaces for a maximum of 120 paved spaces, including existing gravel spaces), enlarged turnaround, a security residence attached to or behind the Visitor Center, rehabilitation of adjacent Hoot Hollow with new shade trees and facilities for five picnic sites, and removal of exotic trees (acacia) to restore open views of the nearby marsh. Planning and conceptual design for the new Visitor Center are currently underway.

Alameda County Flood Control and Water Conservation District's Flood Control Zone 5 Line P Phase 2 Project. Phase 2 of the Zone 5 Line P Project is located downstream of the southern portion of the Project site. This is a separate project and is not addressed in this CEQA document. Phase 2 involves channel improvements along Line P downstream or west of the Project area, through the existing Coyote Hills Regional Park to its outlet at the tidegate discharge culverts in the Alameda Creek levee north of the Visitor Center. A new vehicular bridge is proposed to replace the existing culverts where Patterson Ranch Road crosses Line P.

The habitat enhancement and wetlands mitigation components of the ACFCWCD Phase 1 project (the work south of Ardenwood Creek/Line P) had not been completed at the time this EIR was

² Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Chris Barton, Environmental Programs Manager, East Bay Regional Park District, 9 May 2018.

prepared. This work involves grading two, 2- to 3-foot-deep off-channel basins that will be connected to Ardenwood Creek. The two basins will occupy about 30 acres, and will serve as temporary floodwater detention structures during periods of high flow in Ardenwood Creek. Some of the graded earth will be relocated to create oak savanna uplands with a riparian planting zone along Ardenwood Creek, and to create elevated areas for flood control/maintenance roads. Some of the excess cut not used on site may be off-hauled to an approved disposal location. This mitigation area will be operated and managed by the ACFCWCD over an initial 7- to 10-year period, after which the area would be turned over to the Park District for integration into Coyote Hills Regional Park. The site will serve as a mitigation bank for other maintenance projects.

Under Construction Projects

Patterson Ranch Planned District. This project was approved in 2011 for a 428-acre area that includes the Proposed Project site. On a 101-acre portion of the Patterson Ranch Planned District Project site, located northeast of Ardenwood Boulevard and the Proposed Project site, 500 single-family residential lots and associated parks, trails, streets and utilities are under final phases of construction.

Dumbarton Quarry Regional Recreation Area, Planned District Amendment. This project involves development of the former Dumbarton rock quarry, located south of the Project site, into a 91-acre regional park facility including formal picnic areas, children's playground and play areas, trails, park furniture, parking lots, restroom facilities, turf meadows, overnight camping facilities with a small store, laundry and shower facilities, a 13,000 square foot event center and 150 person outdoor amphitheater with outdoor camp fire pit, and a 1/2-acre corporation and maintenance yard. This project is under construction, and is expected to open in late 2019.

Other Planned Projects That Will Not Be Constructed in the Foreseeable Future

As part of the Patterson Ranch Planned District approved in 2011, a 10-acre site on the west side of Ardenwood Boulevard and immediately adjacent to the Proposed Project site was reserved for a city park and a school for up to 1,100 K-6 students. At the time this EIR was prepared, the City of Fremont, Fremont Unified School District, and the Park District were in discussions about the location of the school and a possible land exchange, and it was considered unlikely that the school would be built for another eight to ten years. In addition, the City of Fremont was planning to retain the City park land but had no plans to build a park at this time.³ Therefore, these projects are not listed above as Proposed, Approved, or Under Construction.

³ Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Michael Kent, Michael Kent & Associates, 26 July 2018.

4.1 *Biological Resources*

This section provides the environmental and regulatory background necessary to analyze the impacts of the proposed Coyote Hills Restoration and Public Access Project to biological resources. It provides an overview of the current **regulatory framework**, describes **existing conditions**, and analyzes the **potential impacts** of the project. This section contains information from the *Coyote Hills Restoration and Public Access Project - Existing Conditions and Opportunities and Constraints Report* prepared by Questa, with Dr. Sam McGinnis (Wildlife Biologist), and Jane Valerius (Plant Ecologist/Wetlands Scientist) for the Proposed Project⁴, as well as information provided in the *Patterson Ranch Planned District Final EIR*, and other published and unpublished sources. Preparation of this report included a records search, field mapping, and a focused field review of potential biological impacts.

Regulatory Framework

This section provides a summary of the regulatory framework pertaining to the biological resources at the Coyote Hills Project Area.

Federal Laws and Regulations

Clean Water Act Section 404 and 401

The U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344). Waters of the United States are defined in Title 33 CFR Part 328.3(a) and include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, Sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The lateral limits of jurisdiction in those waters may be divided into three categories – territorial seas, tidal waters, and non-tidal waters – and is determined depending on which type of waters is present (Title 33 CFR Part 328.4(a), (b), (c)). Activities in waters of the United States regulated under Section 404 include fill for development, water resource projects (such as dams and levees), infrastructure developments (such as highways and airports), and mining projects. Section 404 of the CWA requires a federal license or permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities).

In general, a Corps permit must be obtained before placing fill or grading in wetlands or other waters of the United States. At Coyote Hills, fill or grading in Corps jurisdiction could potentially result from alteration or reconfiguration of seasonal and perennial wetlands for habitat enhancement and restoration activities, or activities associated with trail and bridge construction over existing waterways. Before issuing a permit for such activities, the Corps would be required to consult with the U.S. Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service (NMFS) under Section 7 of the Endangered Species Act (discussed below) if the action subject to Clean Water Act permitting could result in take of federally listed species.

Section 401 of the Clean Water Act (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification from the state in which the discharge originates or would originate, that the discharge would comply with the applicable effluent limitations and water quality standards. A certification obtained for the construction of any facility must also pertain to the subsequent operation of the facility. The responsibility for the protection of water quality in California rests with

⁴ Questa Engineering Corporation. *Coyote Hills Restoration and Public Access Project - Existing Conditions and Opportunities and Constraints Report*. September 2018.

the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs). The Proposed Project is under the jurisdiction of the San Francisco Region RWQCB. The RWQCB's Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) and the California Water Code define Waters of the State as follows: “Waters of the State’ means any surface water or groundwater, including saline waters, within the boundaries of the state (Water Code §13050 (e)).” This definition is broader than that of “waters of the United States” and consequently should always be considered when determining impacts upon water resources.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 prohibits federal agencies from authorizing, permitting, or funding any action that would jeopardize the continued existence of a plant or animal species listed or a candidate for listing as Threatened or Endangered under the FESA. If a federal agency is involved with a proposed action or project that may adversely affect a listed plant or animal, that agency must enter into consultation with the U.S. Fish and Wildlife Service (USFWS) under Section 7(a) (2) of the FESA.

Activities that could potentially result in take of a federally listed threatened or endangered species require an incidental take authorization resulting from a Section 7 consultation or a Section 10 permit. For restoration and public access improvements at Coyote Hills, a Section 7 consultation with USFWS and NMFS would be initiated by the Corps prior to issuing a Section 404 permit for fill or grading in wetlands or other waters, for public access facilities such as trail crossings or bridges, if found to be needed. Section 7 consultations may result in the issuance of a Biological Opinion specific to the project or in the project being appended to an existing Programmatic Biological Opinion for a given listed species.

Rivers and Harbors Act

The Corps has jurisdiction over “navigable waters” under Section 10 of the Rivers and Harbors Act of 1899. “Navigable Waters of the U.S.,” as defined in 33 CFR Part 329, are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the water body, and is not extinguished by later actions or events that impede or destroy navigable capacity. The upper limit of navigable water is at the point along its length where the character of the river changes from navigable to non-navigable, such as at a major fall or rapids. Tidal habitats below Mean High Water (MHW)⁵ also fall under Section 10 jurisdiction. The definition of “navigable waters of the U.S.” under 33 CFR Section 329.1 states that this definition does not apply to authorities under the Clean Water Act defined under 33 CFR Parts 323 and 328. Alameda Creek Flood Control Channel is considered navigable water, and a cantilevered walkway attached to the existing Ardenwood Boulevard crossing may potentially be subject to this review, if it affects navigability, including by non-motorized boats.

Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711) makes it unlawful to possess, buy, sell, purchase, barter or, “take” any migratory bird listed in Title 50 of the Code of Federal Regulations Part 10. “Take” is defined as possession or destruction of migratory birds, their nests, or eggs. Disturbances that causes nest abandonment and/or loss of reproductive effort or the loss of habitats upon which these birds depend would be in violation of the MBTA. Most of the native bird species that occur in the region of the Coyote Hills Regional Park are covered by this Act; therefore,

⁵ MHW is the extent of the line on the shore reached by the plane of the mean (average) high water established by survey with reference to the available tidal datum averaged over a period of 18.6 years.

any activity related to restoration and/or public access improvements that is conducted during the nesting season (January 1 through August 31) must be implemented in a manner that complies with this Act.

State Laws and Regulations

Porter-Cologne Water Quality Control Act

Waters of the State are defined by the Porter-Cologne Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” The RWQCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. These water bodies have high resource value, are vulnerable to filling, and may not be regulated by other programs, such as Section 404 of the CWA. Waters of the State are regulated by the RWQCB under the State Water Quality Certification Program, which regulates discharges of dredged and fill material under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Corps permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State are required to comply with the terms of the Water Quality Certification Program. If a Proposed Project does not require a federal license or permit, but does involve activities that may result in a discharge of harmful substances to Waters of the State, the RWQCB has the option to regulate such activities under its State authority in the form of Waste Discharge Requirements or Certification of Waste Discharge Requirements.

California Endangered Species Act

The State of California enacted similar laws to the FESA, in the California Native Plant Protection Act (NPPA) in 1977, and the California Endangered Species Act (CESA) in 1984. The CESA expanded upon the original NPPA and enhanced legal protection for plants, but the NPPA remains part of the California Fish and Game Code. To align with the FESA, CESA created the categories of “threatened” and “endangered” species. The State converted all animal species listed as “rare” under the FESA into the CESA as threatened species, but did not do so for rare plants. Thus, these laws provide the legal framework for protection of California-listed rare, threatened, and endangered plant and animal species. CDFW implements NPPA and CESA, and its Wildlife and Habitat Data Analysis Branch maintains the California Natural Diversity Database (CNDDDB), a computerized inventory of information on the general location and status of California’s rarest plants, animals, and natural communities. During the CEQA review process, CDFW is given the opportunity to comment on the potential of the Proposed Project to affect listed plants and animals.

The Natural Community Conservation Planning Act

The Natural Community Conservation Planning (NCCP) Act of 1991 represents an effort by the State of California, and numerous private and public partners, to broaden its orientation and objectives beyond those of the CESA and FESA (refer to discussions above). The primary objective of the NCCP Act is to conserve natural communities at the ecosystem scale while accommodating compatible land use. The NCCP seeks to anticipate and prevent the controversies and gridlock caused by species’ listings by focusing on the long-term stability of wildlife and plant communities, including key interests in the process. There are no NCCPs that cover the Project area.

Fully Protected Species & Species of Special Concern

The classification of “fully protected” was CDFW’s initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibian and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The Fish and Game Code sections (fish at Section 5515, amphibian and reptiles at Section 5050, birds at Section 3511, and mammals at Section 4700) dealing with “fully protected” species states that these species “...may not be taken or possessed at any time

and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species,” although take may be authorized for necessary scientific research. This language makes the “fully protected” designation the strongest and most restrictive regarding the “take” of these species. In 2003, the code sections dealing with fully protected species were amended to allow CDFW to authorize take resulting from recovery activities for State-listed species. Implementation of restoration and public access improvements at Coyote Hills must be conducted in a manner that avoids take of listed species.

Species of Special Concern (SSC) are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to CDFG because they are declining at a rate that could result in listing or historically occurred in low numbers and known threats to their persistence currently exist.⁶ This designation is intended to result in special consideration for these animals by CDFG, land managers, consulting Biologist, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under CEQA during project review.

California Fish and Game Code Sections 3503 & 3513

According to Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird (except English sparrows (*Passer domesticus*) and European starlings (*Sturnus vulgaris*)). Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the MBTA, prohibiting the take or possession of any migratory, non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by CDFW.

California Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protects endangered and rare plants from take.

California Native Plant Society

Although not a “State Agency, the California Native Plant Society (CNPS), a NGO, publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version. This inventory is often used in CEQA analysis and where an impact is identified to a plant on this list it most often requires the development of a Mitigation Measure that in effect becomes similar to a permit condition.

The Inventory assigns plants to the following categories:

- 1A Plants Presumed Extinct in California
- 1B Plants rare, threatened, or endangered in California and elsewhere
- 2 Plants rare, threatened, or endangered in California but more common elsewhere
- 3 Plants about which information is needed-a review list
- 4 Plants of limited distribution-a watch list

⁶ The term Species of Special Concern (SSC) is defined in the CDFW CNDDDB Special Animals List, as updated.

Threat Ranks. The CNPS Threat Rank is an extension added onto the California Rare Plant Rank and designates the level of endangerment by a 1 to 3 ranking with 1 being the most endangered and 3 being the least endangered. A Threat Rank is present for all California Rare Plant Rank 1B's, 2's, 4's, and the majority of California Rare Plant Rank 3's. California Rare Plant Rank 4 plants are seldom assigned a Threat Rank of 0.1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a California Rare Plant Rank. In addition, all California Rare Plant Rank 1A (presumed extinct in California), and some California Rare Plant Rank 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension.⁷

- 1 Seriously threatened in California (high degree/immediacy of threat)
- 2 Fairly threatened in California (moderate degree/immediacy of threat)
- 3 Not very threatened in California (low degree/immediacy of threats or no current threats known)

Impacts to plants on lists 1 and 2 are typically assumed to meet CEQA's threshold of significance. This EIR considers plants listed as 1 and 2 as Special Status species. Very few list 3 and 4 plants meet the definitions of Section 1901 Chapter 10 Native Plant Protection Act or Sections 2062 and 2067 California Endangered Species Act of the CDFG Code and are eligible for State listing. However, these species are fully considered during the preparation of environmental documentation relating to CEQA. This may be particularly appropriate for the type and locality of a List 4 plant, for populations at the periphery of a species range or in areas where the taxon is especially uncommon, or has sustained heavy losses, or from populations exhibiting unusual morphology, or occurs on unusual substrates. In addition, plants deemed significant by an experienced botanist may be considered to be significant under CEQA.

Sensitive Vegetation Communities and Natural Communities

Sensitive vegetation communities are natural communities and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. However, these communities may or may not necessarily contain Special Status species. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. CDFW keeps records of sensitive community occurrences in its Natural Diversity Database.⁸ Sensitive plant communities are identified by CDFW (2003, 2007)⁹ and, more recently, in the *List of Vegetation Alliances*.¹⁰ CNDDDB vegetation alliances are ranked 1 through 5 based on NatureServe's (2010) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive.¹¹ Impacts to sensitive natural communities identified in local or regional plans, policies, regulations or by the CDFW or USFWS must be considered and evaluated under CEQA (California Code of Regulations: Title 14, Div. 6, Chap. 3, Appendix G). Specific habitats may also be identified as sensitive in City or County General Plans or ordinances.

⁷ CNPS Ranking System, <http://www.cnps.org/cnps/rareplants/ranking.php>, accessed on September 28, 2018

⁸ California Department of Fish and Wildlife (CDFW), 2010, Natural Diversity Database, Wildlife and Habitat Data Analysis Branch, Sacramento.

⁹ California Department of Fish and Wildlife (CDFW), 2003, *List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database Wildlife and Habitat Data Analysis Branch*, Vegetation Classification and Mapping Program. California Department of Fish and Wildlife (CDFW), 2007. *List of California Vegetation Alliances*, Biogeographic Data Branch. Vegetation Classification and Mapping Program.

¹⁰ California Department of Fish and Wildlife (CDFW), 2009a, *List of Vegetation Alliances*, Biogeographic Data Branch, Vegetation Classification and Mapping Program.

¹¹ NatureServe, 2010, NatureServe Conservation Status, <http://www.natureserve.org/explorer/ranking>.

California Fish and Game Code Section 1600

Streams, lakes, and riparian vegetation as habitat for fish and other wildlife species, are subject to jurisdiction by the CDFW under Sections 1600-1616 of the California Fish and Game Code. Any activity that will do one or more of the following: 1) substantially obstruct or divert the natural flow of a river, stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake; generally require a 1602 Lake and Streambed Alteration Agreement. The term “stream,” which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as follows: “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife.¹² Riparian is defined as, “on or pertaining to, the banks of a stream;” therefore, riparian vegetation is defined as, “vegetation, which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself.”¹³ Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFW.

Local Regulations and Policies

East Bay Regional Park District Master Plan

The Master Plan categorizes Park District parklands into one of five following classifications:

- ◆ Regional Park
- ◆ Regional Preserve
- ◆ Regional Recreation Area
- ◆ Regional Shoreline
- ◆ Regional Trail

The Project area will be incorporated into and managed as an integral part of Coyote Hills Regional Park. A regional park is further described in the Master Plan as having sufficient land area to also support outdoor recreational activities, such as hiking trails. The Master Plan’s vision states that regional parks shall be managed as a balance of environmental concerns and outdoor recreational opportunities.

The East Bay Regional Park District Master Plan (Master Plan) defines the long-term vision for lands managed by the Park District. The Master Plan provides a decision-making framework for Park District management, and identifies policies that will achieve district-wide objectives. Park development objectives, land use classifications, and planning and management guidelines are established by the Master Plan. Policies for the preservation and interpretation of cultural resources are woven throughout the Master Plan, including provisions for public participation, interpretation, environmental compliance, open space protection, land acquisition, land use planning, and facility development. Those policies most pertinent to biological resources in the Project Area are summarized below.

¹² California Department of Fish and Wildlife (CDFW), Environmental Services Division (ESD), 1994, *A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607*, California Fish and Game Code.

¹³ California Department of Fish and Wildlife (CDFW), Environmental Services Division (ESD), 1994, *A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607*, California Fish and Game Code.

Natural Resource Management (NRM)

- ◆ NRM1: The District will maintain, manage, conserve, enhance and restore Park wildland resources to protect essential plant and animal habitat within viable, sustainable, ecosystems.
- ◆ NRM1b: To help mitigate the effects of climate change, the District will endeavor to conserve and connect habitat for native species through its acquisition and planning processes.
- ◆ NRM4: The District will identify, evaluate, conserve, enhance, and restore rare, threatened, endangered or locally important species of plants and animals and their habitats using scientific research, field experience and other proven methodologies. Populations of listed species will be monitored through periodic observations of their condition, size, habitat, reproduction and distribution. Conservation of rare, threatened and endangered species of plants and animals and their supporting habitats will take precedence over other activities, if the District determines that the other uses and activities would have a significant adverse effect on those natural resources.
- ◆ NRM5: The District will maintain and manage vegetation to conserve, enhance and restore natural plant communities, to preserve and protect populations of rare, threatened, endangered, and sensitive plant species and their habitats; and where possible to protect their biodiversity and to achieve a high representation of native plants and animals.
- ◆ NRM7: The District will manage agricultural sites and cultivated areas in accordance with appropriate agricultural or landscaping practices and Integrated Pest Management (IPM) methods to control noxious weed infestations, broom and other invasive, non-native shrubs and to eventually replace these invasive plants with desirable native species.
- ◆ NRM8: The District will conserve, enhance and restore biological resources to promote naturally functioning ecosystems. Conservation efforts may involve using managed conservation grazing in accordance with District's Wildland Management Policies and Guidelines, prescribed burning, mechanical treatments, Integrated Pest Management and/or habitat protection and restoration. Restoration activities may involve the removal of invasive plants and animals, or the reintroduction of native or naturalized species, adapted to or representative of a given site.
- ◆ NRM9: The District will conserve and protect native animal species and enhance their habitats to maintain viable wildlife populations within balanced ecosystems. Non-native and feral animals will be managed to minimize conflicts with native wildlife species. The District will cooperate on a regular basis with other public and private land managers, and recognized wildlife management experts to address wildlife management issues on a regional scale.
- ◆ NRM12: The District will manage riparian and other wetland environments and their buffer zones to preserve and enhance the natural and beneficial values of these important resources and to prevent the destruction, loss, or degradation of habitat. The District will participate in the preservation, restoration and management of riparian and wetland areas of regional significance, and will not initiate any action that could result in a net decrease in Park wetlands.
- ◆ NRM12b: The District will engage in watershed management planning and practices that will address the shifts in habitat ranges caused by climate change through the preservation and enhancement of streams and wetland areas.

City of Fremont

Lands within the Expansion area are within the City of Fremont and some construction activities are potentially subject to the City of Fremont General Plan or Municipal Code, including zoning, building, grading, and stormwater management. City of Fremont ordinances also provide protection of certain native trees, stream courses, and Special Status species. As a Special District, the Park

District has statutory authority over certain areas such as habitat protection and enhancement, landscape management, and construction and operation of recreational facilities. Policies relevant to Biological Resources and their consistency with the Proposed Project are also discussed *Section 3.9 - Required Permits and Approvals*.

Existing Conditions

Historical Ecology

The Historical Ecology of the Project area consists of information obtained on plant communities and habitats that existed within the Project area prior to settlement and subsequent modifications to the landscape from farming, land reclamation activities, salt production, road construction, and flood control channel and irrigation canal and drainage construction. Historic ecological information can help inform the development of a habitat restoration and enhancement Project, while also contextualizing the substantial changes to soil conditions, surface water and shallow zone groundwater hydrology that have occurred over the last 150 or more years.

Information on the historical ecology of the Project area is available from the 2013 Alameda Creek Watershed Historical Ecology Study¹⁴. **Figure 4.1-1**, derived from this source, shows the plant communities that occurred in the Project area prior to the changes that occurred from the pioneering settlements of the historic Ardenwood area of Fremont. Landscape alteration activities in the Ardenwood area began in the late 1850s when this area began to be intensively farmed, flood irrigated, drained, and reclaimed from the edge of the Bay. Part of the land reclamation involved diverting silt laden runoff from the nearby streams to more low lying saline areas to build up elevations with better soils, as well as installation of a complex agricultural drainage and irrigation system.

The most notable feature on this map is historic Ardenwood Creek and its' riparian area, which was the forerunner of the present day Patterson Slough remnant. Ardenwood Creek consisted of braided distributaries prior to construction of the Alameda Creek and Crandall Creek flood control channels beginning in the late 1960s¹⁵. A large willow sausal or flooded Willow Grove surrounded the creek system and extended to the north and south, covering much of the northern and a part of the central portion of the Park Project Expansion area. Another remnant of this historic channel system occurs on the nearby Ardenwood Historic Farm and includes such riparian species as red willow, arroyo willow, black walnut, and coast live oak.

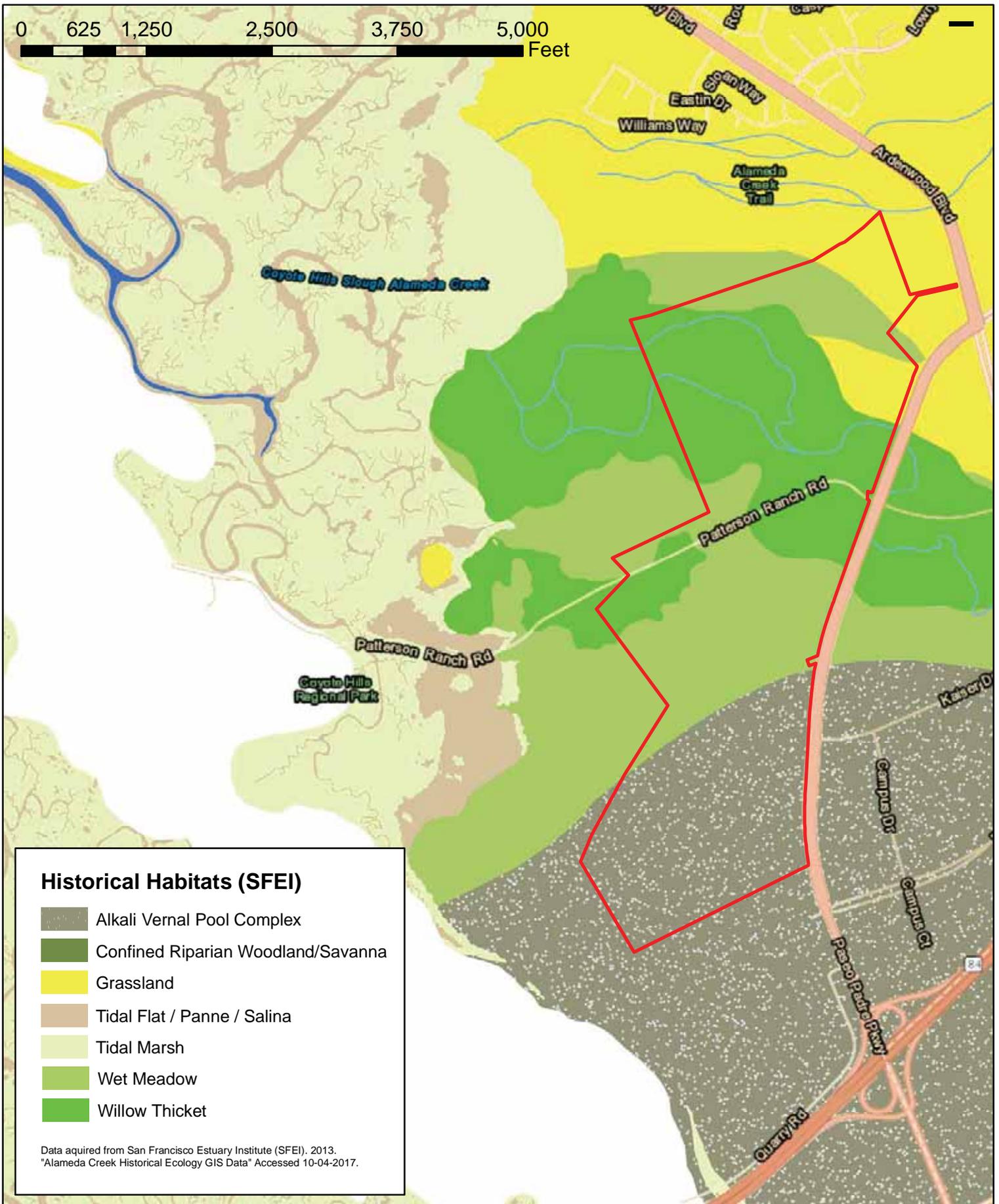
Wet meadow is shown on the Historic Ecology map as occurring in the central portion of the Project area, between present day Patterson Ranch Road and Ardenwood Creek. This was a naturally sub-irrigated grassland system, fed by a relatively shallow fresh to slightly brackish groundwater system. Much of the wet meadow area is presently farmed, and higher elevation areas contain the best agricultural soils.

Alkali vernal pool complex are shown to the south of Ardenwood Creek. This area still retains a central, salt grass covered drainage ditch, along with scattered shallow drainage depressions that pond rain water seasonally.

The depiction of the alkali vernal pool wetlands in this area is consistent with information collected for the LUPA and restoration planning, which indicates elevations are between about 6.0 and 9.0 feet (NAD88). These elevations represent salt marsh ecotone or the transition zone between marsh and upland grasslands and wet meadow. Soil sampling and laboratory analysis also indicate this area is

¹⁴ San Francisco Estuary Institute (SFEI). 2013. *Alameda Creek Watershed Historical Ecology Study*.

¹⁵ Oakland Museum of California. 2010. *Creek and Watershed Map of Western Alameda County, A Digital Database*.



moderately to strongly saline- alkaline with a strongly saline alkali shallow groundwater table 2 to 4 feet below ground surface, during some portions of the year.

Wet meadow and willow thickets are also depicted as historically occurring along Patterson Ranch west of the Park Expansion area with wet meadow being displaced by tidal marsh and saline tidal flat/ panne as the land surface drops in elevation around the toe of the Coyote Hills upland grasslands.

Today much of the lowlands to the west are occupied by cattail dominated marshes which occur in ponded areas, and along the relocated and reconstructed Line P / Ardenwood Creek Flood Control Channel. Scattered remnant patches of willow (willow thickets) also remain in this area.

Existing Use and Management Activities

The Project area contains a variety of native and non-native plant communities that provide a diversity of wildlife habitat. The plant communities and land cover types include: urban or altered lands, fallow and cultivated farm fields, disturbed and weedy grassland areas, degraded seasonal wetlands dominated by non-native weedy species, and mixed riparian forest and oak woodland along Patterson Slough.

Historic plant communities have been substantially altered over time by human activities, especially by historic farming, which included a complex irrigation and drainage system that has since degraded, and by flood control facilities construction along Crandall Creek, Alameda Creek, and Ardenwood Creek. Internal farm and maintenance access roads and adjacent residential and commercial development have also contributed to changes in site hydrology and plant community composition.

Current and on-going management of the Project area includes mowing and sheep and goat grazing for weed and fire fuels control, and access to Patterson Slough and adjacent ponded wetland areas for mosquito and vector control purposes. Historic and the current disking of crop residue, seeding and planting operations and field mowing have taken place to the edge of the field boundaries along Patterson Ranch Road, Paseo Padre Parkway and Ardenwood Boulevard, Line P/Ardenwood Creek, and the Burrowing Owl levee on the south end of the Project area. Mowing also occurs up to the edge of the Slough. Grazing also occurs up to the field edges and the edge of Patterson Slough, and mowing equipment and grazing support vehicles and equipment, including a Sheppard's trailer have traditionally staged at a disturbed upland area associated with the former and now demolished farm labor housing barracks located near the middle of Patterson Slough, on its immediate south side.

Visitor use of the existing trail systems in the Project area and throughout the Park bring human presence into close proximity to sensitive wildlife habitats, including the Patterson Slough riparian corridor. This includes the existing Crandall Creek Trail located to the north of Patterson Slough and paralleling Alameda Creek, the Tuibun Trail, which parallels Patterson Ranch Road on its north side and runs from Paseo Padre Parkway to the Visitor Center, and the Willow Trail, that provides a connection between Crandall Creek Trail and the Tuibun Trail via a foot path that crosses Patterson Slough near its top or north end.

Biological Communities

There are 11 existing biological communities or plant communities and habitat types that the Coyote Hills Project area (**Figure 4.1-2**) in addition to agricultural fields and urban and developed areas such as the Farm Corporation Yard. The site is dominated by non-sensitive biological communities including non-native grassland and developed areas. Both wetland and riparian sensitive biological communities are found on the project site. These are broadly categorized as wetlands/creeks or riparian, uplands, grasslands or areas that are weedy (ruderal). These communities consist of habitats with groupings of plant species and associated wildlife that share a niche within the same or similar



biological and environmental conditions. These communities/habitats, along with their historical context, are discussed below.

Non-Sensitive Biological Communities

Ruderal Grassland (Rg). The ruderal or weedy non-native annual grassland community is one of the larger plant communities present within the Coyote Hills Project area, including in the area immediately north and south of Patterson Ranch Road, surrounding Patterson Slough, and south of Ardenwood Creek and on the hillsides above the Visitor Center

This biological community is characterized by a mixture of some native and mostly non-native species that include grasses, forbs, and shrubs. These species include slender wild oat (*Avena fatua*), Italian rye (*Festuca perennis* [*Lolium multiflorum*]), rigput brome (*Bromus diandrus*), wild radish (*Raphanus sativa*), bristly ox-tongue (*Helminthotheca* [*Picris*] *echioides*), mustard (*Brassica nigra*, *B. rapa*), cheeseweed (*Malva parviflora*), and wild oat (*Avena barbata*), and Italian thistle (*Carduus pycnocephalus*).

Despite its weedy appearance, this mixed plant community supports a variety of endemic mammal populations including the California ground squirrel (*Otospermophilus beecheyi*), California meadow vole (*Microtus californicus*) and the Botta pocket gopher (*Thomomys bottae*). These small mammal populations provide a major food resource for local predators including the Pacific gopher snake (*Pituophis catenifer catenifer*), White-tailed kite (*Elanus leucurus*), and Northern harrier (*Circus cyaneus*). The burrows of ground squirrels and pocket gophers within these non-native grassland communities also provides essential habitat for the burrowing owl (*Athene cunicularia*) (a California and Federal Species of Concern) whom use abandoned burrows as roosting sites.

Brush (BR). An area of Brush or Brushland, a remnant of the historic coastal scrub community occurs on the upland hills above the Visitor Center. This plant community includes areas of Coyote brush and poison oak, and some scattered California sagebrush, along with annual native and non-native grasslands and forbs.

A variety of wildlife use this habitat, including deer, California thrasher, rock wren, California quail, and Western fence lizard, and California ground squirrel in more open grassy areas. The loggerhead shrike, a California and federal species of Concern nests in the hills.

Agricultural Cropland (Ag). This map unit consists of disturbed or cropped agricultural fields that were also historically (and currently) grazed by cattle and sheep. They are typically disked between crop cycles and also have been used for grains, potatoes, root crops, tomatoes and corn since approximately 1850.

The plant community that resulted from this land use when not in crop production is considered non-native grasses and weedy, ruderal vegetation including black mustard (*Brassica nigra*), poison hemlock (*Conium maculatum*), field bindweed (*Convolvulus arvensis*) and perennial pepperweed (*Lepidium latifolium*).

Although crop land areas are not reflective of the historic ecology of Patterson Ranch, it still provides foraging and habitat for a myriad of small to medium sized mammals such as ground squirrels (*Spermophilus beecheyi*), black-tailed jackrabbits (*Lepus californicus*), deer mice (*Peromyscus maniculatus*), the California Vole (*Microtus californicus*) and Botta's pocket gopher (*Thomomys bottae*) that use these areas, especially during the part of the year that the fields are fallow. As noted above, this constitutes good foraging habitat for a number of important avifauna and large raptor species that use this area.

Developed or Urban Area (D). Developed portions of the Project area include roads and trails that serve the existing the Coyote Hills Regional Park, including Patterson Ranch Road and Tuibun Trail, utility access roads, parking lots, levees, existing buildings and other Park facilities. The primary developed area consists of the Farm Corporation Yard located adjacent to Paseo Padre and south of

Patterson Ranch Road and associated with the leased farm lands. These developed features also include an existing adjacent parking area and several farm buildings. Other developed areas include a utility service area (Union Sanitation District pump station) south of Ardenwood Creek at Paseo Padre Parkway.

Unless fully paved, these developed areas are primarily host to scattered non-native grassland, and ruderal herbaceous populations of wild radish (*Raphanus sativus*), mustard (*Brassica nigra*, *B. rapa*), cheeseweed (*Malva parviflora*), wild oat (*Avena barbata*), and ripgut brome (*Bromus diandrus*), slender wild oat (*Avena fatua*), Italian rye (*Festuca perennis* [*Lolium multiflorum*]), ripgut brome (*Bromus diandrus*), bristly ox-tongue (*Helminthotheca* [*Picris*] *echioides*), and Italian thistle (*Carduus pycnocephalus*).

Sensitive Biological Communities

The preliminary waters assessment was based primarily on the presence of unvegetated, ponded areas, or flowing water, or evidence indicating their presence such as a high water mark or a topographically defined drainage course. Areas of wetlands are also shown on the Biological Communities Map (**Figure 4.1-2**). Any potential wetland areas were identified as areas exhibiting dominant hydrophytic vegetation, hydric soil indicators, and wetland hydrology indicators. Hydrophytic vegetation was indicated by dominance¹⁶ of plant species with a wetland indicator status¹⁷, ¹⁷ of OBL, FACW, or FAC as given on the U.S. Fish and Wildlife Service List of Plant Species that Occur in Wetlands.¹⁸ Evidence of wetland hydrology can include direct evidence (primary indicators), such as visible inundation or saturation, surface sediment deposits, algal mats and oxidized root channels, or indirect indicators (secondary indicators), such as a high water table in the dry season. Some indicators of wetland soils include soils with a sulfidic odor, and soils that contain redoximorphic features as defined in *Field Indicators of Hydric Soils in the United States*.¹⁹

The Project area is somewhat unique in that depressional areas that pond water in the winter have mostly weedy and facultative plants, but most often lack soil indicators of wetlands in their upper profile, other than having very dark soil colors, indicative of their association with a productive biological system.

Freshwater Seasonal Wetland (Sw). The freshwater seasonal wetland plant community occurs scattered throughout the Coyote Hills Project area, including the west end of the farmed area south of Patterson Ranch Road, near Patterson Slough, associated with remnant agricultural drainage ditches, within the southern portion of the Project Area, and along Crandall Creek (K-line channel). These most often occur associated with topographic depressions that pond water, or in low lying

¹⁶ The presence of hydrophytic vegetation is determined based on indicator tests described in the Arid West Supplement. The primary methodology to determine hydrophytic vegetation dominance in the Arid West Supplement is to apply the “50/20 rule” (Indicator 1; Dominance Test) described in the manual. To apply the “50/20 rule,” dominant species are chosen independently from each stratum of the community. Dominant species are determined for each vegetation stratum from a sampling plot of an appropriate size surrounding the sample point. Dominants are the most abundant species that individually or collectively account for more than 50 percent of the total vegetative cover in the stratum, plus any other species that, by itself, accounts for at least 20 percent of the total vegetative cover. If greater than 50 percent of the dominant species has an OBL, FACW, or FAC status, the sample point meets the hydrophytic vegetation criterion.

¹⁷ OBL = Obligate, always found in wetlands (> 99 percent frequency of occurrence); FACW = Facultative wetland, usually found in wetlands (67-99 percent frequency of occurrence); FAC = Facultative, equal occurrence in wetland or non-wetlands (34-66 percent frequency of occurrence).

¹⁸ Reed, Jr., Porter B. 1988. National List of Plant Species That Occur in Wetlands: National Summary. U.S. Fish & Wildlife Service. Biol. Rep. 88 (24). 244 pp.

¹⁹ U.S. Department of Agriculture (USDA), Natural Resources Conservation Service, 2010b, *Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils*, Version 6.0, in cooperation with the National Technical Committee for Hydric Soils, U.S. Army Corps of Engineers.

areas that either have a shallow sub-surface clay pan that perches water during the rainy season, or have a high seasonal groundwater table.

Seasonal wetlands are freshwater wetlands that support ponded or saturated soil conditions during winter and spring and are dry through the summer and fall until fall/winter rainfall begins to saturate the soil. Vegetation typically associated with seasonal wetlands in the Patterson Ranch Project study area consists of wetland generalists, such as hyssop loosestrife (*Lithium hyssopifolia*), brass buttons (*Cotula coronopifolia*), birds-foot trefoil (*Lotus corniculatus*), toad rush (*Juncus bufonius*), rabbitsfoot grass (*Polygogon monspeliensis*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneaum*), and Italian ryegrass (*Festuca perennis*).

The presence of invasive plant species within this plant community is primarily the result of proximity to adjacent disturbed agricultural/ruderal plant communities. Some of the seasonal wetlands were also at one time farmed, as drainage conditions were improved by the installation of an agricultural ditch system that has since deteriorated. Larger areas of high quality freshwater wetland plant communities provide potential nesting habitat for a number of birds including the Northern harrier (*Circus cyaneus*), California black rail (*Laterallus jamaicensis coturniculus*), and the short eared owl (*Asio flammeus*). Of these, short-eared owls and California black rails have been observed to occur to the west in Coyote Hills Regional Park, but not in the Park Expansion area.

Saline Seasonal Wetland (Sx). Saline seasonal wetlands are present in large low lying areas to the north and south of Patterson Ranch Road, beginning generally west of the kiosk and extending to the Ardenwood Creek crossing of Patterson Ranch Road. This seasonal wetland type also occurs along a drainage ditch bisecting the historic vernal pool area south of Ardenwood Creek.

Pickleweed (*Salicornia virginica*) dominates or co-dominates the majority of this area, along with other annual grasses and other salt tolerant native plants. These seasonal wetlands typically extend from an elevation of about 4.0 to 6.5 feet (NAD) where they transition to freshwater seasonal wetlands in depressional areas and ruderal upland grasslands at slightly higher elevations. During winter months incident rainfall and runoff from adjacent areas is temporarily impounded as it slowly infiltrates or drains to adjacent ditches and ponds. Saline groundwater in these areas is within 0.5 and 2.0 feet of the ground surface,

Pickleweed becomes less dominant in the saline seasonal wetlands along and south of Patterson Pass Road, where fat hen (*Atriplex petalua*), brass buttons, (*Cotula coronopifolia*), vernal pool mint (*Pogogyne zizpforoides*) Dowingia (*Dowingia concolor*) salt grass (*Distichlis spicata*) hair grass (*Deschompsia danthonoides*) rabbit foot grass (*Polygogon nonspeliensis*) and dock (*Rumex* sp.) also occur, along with such weeds as alkali Russian thistle, bristly ox tongue (*Picris echiodes*) and Mediterranean barley.

Alkali bulrush (*Bolboschoenus maritimus*) and Baltic rush (*Juncus baltica*) occur in small wetter depressional areas and areas of cattail marsh also contain Tule (*Scirpus acutus*) south of Patterson Ranch Road and west of Ardenwood Creek.

Saltgrass (*Distichlis spicata*) is the predominant plant in the Saline seasonal wetlands mapped in the former agricultural drainage ditch in the area south of Ardenwood Creek, although Rabbitsfoot grass (*Polygogon monspeliensis*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneaum*), and Italian ryegrass (*Festuca perennis*) were also observed to be present.

Areas dominated by saltgrass occur where saline-alkali sub-soils became the new surface following excavation of the drainage ditch, and where brackish groundwater was brought close to the surface. This represents the likely post grading plant cover for restoration areas that involve shallow excavation in areas with strongly saline alkali sub-soils.

The saline seasonal wetlands are an important resting and foraging area for migratory shorebirds during the fall and winter. These include Black-necked stilt, Common Snipe, Dunlin, Greater Yellow

Legs and Long-Billed Dowitcher. Other notable birds using this habitat include the Short-eared owl, Saltmarsh Common Yellowthroat, Northern Harrier, and Savannah Sparrow.

California Black Rail, (*Laterallus jamaicensis coturniculus*) a California Threatened species (CT) and a Federal Bird of Conservation Concern (BCC), and Salt Marsh Harvest Mouse, (*Reithrodontomys raviventris*) a California and federal Endangered species (CT, FT) utilize this habitat and nearby seasonal wetlands and grasslands. Black Rail is known to occur to the north of Patterson Ranch Road, near the Alameda Creek Flood Control Channel, while salt marsh harvest mouse has been confirmed to be present west of the Park Expansion area, north of Patterson ranch Road. Special Status species are discussed further in the next section of Biology.

Freshwater Emergent Wetland (Fw). This plant community occurs in areas of ponding and seasonally high groundwater, where upwelling fresh to slightly brackish groundwater intersects with the ground surface on the west side of Patterson Slough, making the soils near perennially saturated. In the Project study area plant species associated with perennial freshwater marsh include willows (*Salix* sp.) Mediterranean barley, Italian ryegrass, rabbitsfoot grass nut sedge (*Cyperus eragrostis*), Baltic rush (*Juncus balticus*), toad rush, narrow leaved cattail (*Typha angustifolia*), alkali bulrush (*Bolboschoenus robustus*), hardstem bulrush or tule (*Schoenoplectus acutus* var. *occidentalis*), Chairmaker's bulrush (*Schoenoplectus americanus*), stinging nettle (*Urtica dioica* ssp. *holosericea*) and willowherb (*Epilobium ciliatum*).

Review of the existing biological studies that have been completed for this area also noted that previous fieldwork identified the presence of these perennial emergent marsh species, but this plant community has not been allowed to fully develop as it has either been disked or grazed during previous years.

Cattail Marsh (CM). A small Cattail Marsh, which is a form of freshwater emergent marsh, is found in the northern part of the site, at the northern end of Patterson Slough, where the willow over story is more open and where water is ponded at depths of more than 3 feet for extended periods. Extensive areas of cattail marsh are also present just west of the Project area within the existing Coyote Hills Regional Park, and to the immediate north of the Project area along portions of Crandall Creek (K-line channel), as well as within Ardenwood Creek at or near the western end of the Project Area.

Cattail Marsh communities consist of varying densities of cattail varieties including common cattail (*Typha latifolia*), and narrow leaf cattail (*T.angustifolia*) interspersed with occasional patches of bulrush (*Scirpus acutus*) and hardstem tule (*Schoenoplectus acutus*). Birds that frequent these cattail dominated marshes include the pied billed grebe (*Podilymbus podiceps*), ruddy duck (*Oxyura jamaicensis*), and red winged blackbird (*Agelaius phoeniceus*).

Historically, the area now vegetated with cattail marsh to the west was more diverse, and was host to a wide variety of marshland vegetation that supported birds, and mammals including tules (*Schoenoplectus acutus*) and pickleweed (*Salicornia pacifica* [*S.virginica*]). Farming practices, land alteration, diking, salt production, and increased freshwater runoff are all primary contributors to the establishment and encroachment of dense cattail stands within and around the Project area.

Ponds and Creeks (P). Areas of deeper ponded water and creek channels are shown on the Biological Communities Map in blue, using the symbol P. These areas are generally dominated by two types of cattail. Common cattail (*Typha latifolia*) typically occurs from near water's edge out to a depth of five or six feet. Narrow leaf cattail (*Thypa angustifolia*) predominates on the wet shoreline edge.

The density of the cattail stands in many places may impede use of this habitat by aquatic birds, but non-aquatic birds such as long-billed marsh wren (*Cistothorus palustris*), common salt marsh yellowthroat (*Geothlypis trichas sinuosa*), and red-winged black-bird (*Agelaius phoeniceus*) benefits from

these dense stands. The more open ponded areas provide an important winter refuge for migratory waterfowl, including northern shoveler (*Anas chrypeata*), northern pintail (*Anas acuta*), and green-winged teal (*Anas carolinensis*). Diving ducks, terns, and pelicans also use the open water areas. Common breeding birds in the cattail rimmed ponds and marsh areas include American bittern, common moorhen (*Gallinula chloropus*), marsh wren (*Cistothorus palustris*), pied-billed grebe (*Podilymbus podiceps*), and ruddy duck (*Oxyura jamaicensis*). A large flock of tri-colored blackbird (*Agelaius tricolor*), a California Species of Special Concern, uses the emergent marsh and ponds from around mid-November through mid-January.

Restored Creek and Seasonal Wetland Restoration Area (RR). During the fall of 2016, the Line-P section of the Coyote Hills Project area was restored by Alameda County Flood Control and Water Conservation District as part of the Ardenwood Creek Restoration Project. The Project was completed in order to improve flood flow capacity and efficiency, discourage cattails from reestablishing in the channel, and create an integrated ecosystem of riparian and seasonal wetland habitats. There are approximately 20 acres of restored creek and seasonal wetland, including open water, seasonal wetlands, and mixed riparian forest along Ardenwood Creek in the Coyote Hills Project area.

The creek corridor was planted with native trees as a part of the creek restoration work including coast live oak (*Quercus agrifolia*), western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), arroyo willow (*Salix lasiolepis*), and box elder (*Acer negundo*) in order to create an area of mixed riparian forest habitat. This project is in the establishment phase of implementation.

Willow Thicket (Wt). Willow thicket occurs at the east end of Patterson Slough as well as adjacent to Patterson Ranch Road in the northern portion of the site. Willow thickets are also present west of the Coyote Hills Project area and along the flat lands of Crandall Creek (K-line channel).

Willow thickets are dominated by Arroyo willow (*Salix lasiolepis*), and Red willow (*Salix laevigata*) although some widely scattered cottonwoods, box elders and western sycamore trees may occur. Willow thickets are also distinct from mixed riparian forests by their lack of understory vegetation, and the absence of a perennial surface water feature such as a creek.

Willow thickets can provide nesting and foraging habitat for resident and migratory bird species including the tricolored blackbird (*Agelaius tricolor*), yellow headed blackbird (*Xanthocephalus xanthocephalus*), and the saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*). All of these have all been observed within the Project Area or within willow thickets in the adjacent Coyote Hills Regional Park.

Mixed Riparian Forest (Wf). Patterson Slough is the most important biological feature within the Project area and is characterized by a mixed willow-dominated riparian forest.

Mixed willow riparian forests are typically characterized by occurring along stream courses with near perennial surface or near-surface water. The Patterson Slough mixed riparian forest has an established canopy including arroyo willow (*Salix lasiolepis*), coast live oak (*Quercus agrifolia*), and western sycamore (*Platanus racemosa*). This community also has a dense, established vegetative understory that supports poison oak (*Toxicodendron diversilobum*), California blackberry (*Rubus ursinus*), California rose (*Rosa californica*), and coyote brush (*Baccharis pilularis*). It represents the remnant of a once extensive willow sausal along historical Crandall that occurred from just south of Patterson Ranch Road, to north of Alameda Creek. This was considered to be the largest willow sausal in the East Bay.

Mixed willow riparian forests are another example of a biological community that has decreased in range over the past 150 years due to human use, development, and colonization of invasive plant species. Historically in the Project area, virtually all of the area north of Patterson Ranch Road was a riparian forest or a willow sausal (a willow marsh or forested lake with standing water). Despite the

reduction of their range, these forests still host numerous species of migratory birds including Nuttall's woodpecker (*Picoides nuttallii*), and white tailed kite (*Elanus leucurus*). These forests also provide habitat for a number of medium sized mammals including the western red bat (*Lasiurus borealis*), striped skunk (*Mephitis mephitis*), Virginia opossum (*Didelphis virginiana*), common raccoon (*Procyon lotor*), grey fox (*Urocyon cinereoargenteus*), and mule deer (*Odocoileus hemionus*).

Oak Woodland (Ow). The oak woodland plant community within the Project area consists of a small area of coast live oak trees located north of Patterson Ranch Road at Paseo Padre Parkway, at the south-east end of Patterson Slough. Previous biological studies of Patterson Slough have considered it to be a part of the riparian corridor, but it was separated as a distinct plant community as drainage and hydrology and topographic conditions here are considerably different from the remainder of the Slough, and to point out its unique character for consideration as potential habitat expansion associated with oak savanna restoration and enhancement planning.

This community is comprised of coast live oak (*Quercus agrifolia*) with a developed understory consisting of a mixture of native California grasses and non-native grasses, and forbs. Some of these are slender wild oat (*Avena fatua*), Italian rye (*Festuca perennis* [*Lolium multiflorum*]), ripgut brome (*Bromus diandrus*), wild radish (*Raphanus sativa*), bristly ox-tongue (*Helminthotheca* [*Picris*] *echioides*), and Italian thistle (*Carduus pycnocephalus*).

Cottonwood Stands (Cs). There is a very open stand of widely scattered mature western cottonwood (*Populus fremontii*) trees that extends west from the culvert at Paseo Padre Parkway west to the end of the restored section of the Ardenwood Creek channel. A "grove" of widely scattered cottonwoods also occurs to west of the end of the Ardenwood Creek in the adjacent Coyote Hills Regional Park. Some cottonwood trees along Ardenwood Creek were inter-planted with Western Sycamore and Coast Live Oak trees as a part of the creek restoration project (see Rr description).

Among the local wildlife that are known to frequent and or inhabit these scattered cottonwood trees are the Cooper's Hawk (*Accipiter cooperi*), Nuttall's woodpecker (*Picoides nuttallii*), black-tailed jackrabbit (*Lepus californicus*), deer mouse (*Peromyscus maniculatus*) and western red bat (*Lasiurus borealis*).

Special Status Species

Special Status Wildlife Species

Species of Special Concern (State) or Species of Concern (Federal) are special animal /plant species tracked by the California Natural Diversity Database (CNDDB), regardless of their legal or protection status. The CNDDB is maintained by the California Department of Fish and Wildlife (CDFW) and is a database or tool that inventories the status and locations of rare plants and animals in California. It is often used in the preparation of the Biological Resources section of CEQA documents and in project regulatory permitting.

For purposes of describing the Special Status of wildlife species below, the following acronyms are used: Threatened (FT) or Endangered (FE) by the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) under the Federal Endangered Species Act (FESA); Birds of Conservation Concern (BCC); those that are listed or proposed for listing as Rare (CR), Fully Protected (CFP), Threatened (CT), or Endangered (CE) by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA); those recognized as Species of Special Concern (CSC) by the CDFW; those recognized by the Western Bat Working Group (WBWG) as High or Medium priority species; and those recognized by the Federal Bald Eagle and Golden Eagle Protection Act (FBGE). Special Status wildlife species are shown in **Table 4.1-1** and **Figure 4-1.3**.

TABLE 4.1-1 SPECIAL STATUS WILDLIFE SPECIES

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
BIRDS				
<i>Melospiza molodia pusillula</i> Alameda Song Sparrow	None	CSC, BCC	Present along eastern and southern San Francisco Bay salt marshes. Roosts in low lying marsh vegetation, high enough to avoid flooding during high tides.	Moderate Potential: The Project area provides potential habitat for this species with foraging and nesting habitat present.
<i>Laterallus jamaicensis coturniculus</i> California Black Rail	State Threatened	BCC, CFP	Resident in marshland (saline to freshwater) with established, dense vegetation. Common in upper tidal zone of emergent wetlands or brackish marshes dominated by bulrush (<i>Scirpus spp.</i>), cordgrass (<i>Spartina spp.</i>), and pickleweed (<i>Salicornia spp.</i>), commonly found nesting in dense cover such as pickleweed. Prefers larger, undisturbed marshes close to a major water source.	Moderate Potential: Suitable nesting habitat exists to the west of the Project area in Coyote Hills Regional Park and CBR observed in adjacent Regional Park. Unlikely to occur within Park Expansion Project area due to lack of suitable habitat.
<i>Rallus longirostris obsoletus</i> California Ridgeway Rail	State Endangered Federal Endangered	CFP	Endemic to large salt and brackish marshes; requires shallow areas, tidal channels, or mudflats for foraging.	Low Potential: Species has been observed west of Project area in Coyote Hills Regional Park. Status of species breeding locations within Alameda county is undetermined, documented individuals may not have bred adjacent area. Project area does not contain suitable habitat.
<i>Accipiter cooperi</i> Cooper's Hawk	None	CWL	Nests and breeds within mixed riparian forests alongside creek banks. Forages in open grasslands, valleys, and foothills.	Moderate Potential: The mixed riparian forests, oak and willow clusters along Patterson Slough provide adequate nesting habitat for this species.

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<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Agelaius tricolor</i> Tricolored Blackbird	CDE	BCC, CSC	This species breeds within riparian scrubland, tules/willow/cattail thickets, and within freshwater marshes.	High Potential / Observed: Emergent freshwater thickets along Patterson Slough, K-line, and P-line channels provide nesting habitat. Species observed within Project area by H.T. Harvey (2001)
<i>Xanthocephalus xanthocephalus</i> . Yellow headed blackbird	None	CSC	Migratory species that nests within emergent wetlands within dense thickets, deep water, and along the edges of lakes or large ponds. Forages on large aquatic insects during breeding season.	Low Potential: Rarely nests within the San Francisco Bay Area, Project area are not a sufficient breeding habitat.
<i>Athene cunicularia</i> Burrowing Owl	None	BCC, CSC	Resident of open, dry grasslands/scrublands with low growing vegetation. Breeds, forages in open grasslands that contain small mammal burrows.	High Potential / Observed: Observed along the northern perimeter of the Project area during the winter of 2002-2003 (Dexter, Wendy. May 10 th 2007.) Species has also been observed within Coyote Hills Regional Park.
<i>Elanus leucurus</i> White Tailed Kite	None	CFP	Resident of coastal/valley lowlands of California. Nests in isolated stands of large shrubs or trees, surrounded by open grassland. Preys on small mammals, birds, insects, reptiles, and amphibians.	High Potential / Observed: Observed foraging within the Project area during field surveys. Breeding habitat is present on site. Observed in 2000 and 2001 nesting within mixed riparian forests (H.T. Harvey & Associates 2001).
<i>Aquila chrysaetos</i> Golden Eagle	FBGE	CFP, CWL, BCC	Breeds and winters on cliff-walled canyons, and large trees within foothills, chaparral, sage-juniper flats mountain areas and deserts.	High Potential/Observed: Occurs within the Coyote Hills Regional Park and likely forages within the Project area.

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<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Circus cyaneus</i> Northern Harrier	None	CSC	Nests within shrubby vegetation and forages in open grasslands, meadows, and wetlands.	High Potential / Observed: Nesting habitat present along the margins of Patterson Slough and the K-line and P-line channels. Suitable foraging habitat is present within the agricultural fields of the Project area. Species was observed in 2007, foraging, and documented breeding/nesting within Coyote Hills Regional Park.
<i>Geothlypis trichas sinuosa</i> Saltmarsh Common Yellowthroat	None	CSC, BCC	Found in dense, mixed riparian thickets, and forests along waterways.	Moderate Potential: Suitable habitat and nesting grounds are present in the mixed riparian forest along Patterson Slough. Known to occur in Coyote Hills Park to the immediate west of the Project Area.
<i>Riparia riparia</i> Bank Swallow	State Threatened		Migratory species to lowland and riparian habitats within coastal California. Nests in colonies along vertical cliffs with fine textured sandy soils near streams, lakes, or ocean.	High Potential / Observed: A possible colony was noted in a 1983 CNDDDB observation within the Project area; and several nests were observed and protected under the Line P culvert crossing of Paseo padre Blvd in Spring 2016.
<i>Charadrius alexandrinus nivosus</i> Western Snowy Plover	Federally Threatened	CSC, BCC	Resident of sandy beaches, salt pond levees and the banks of alkali lakes. Nesting habitat is sandy/gravelly soils.	No Potential: Project area does not contain suitable habitat for nesting.

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<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Buteo regalis</i> Ferruginous Hawk	None	BCC	Preys upon lagomorphs (ground squirrels, mice, etc) within open grasslands, sage brush flats, desert scrub, and low foothills, valleys.	Moderate Potential: Suitable foraging habitat is present within the Project area for wintering; species has not been documented to breed within Project area but is rarely observed within the adjacent Coyote Hills Regional Park.
<i>Falco peregrines anatum</i> American Peregrine Falcon	Federally Delisted	CFP, BCC	Resident species that forages within coasts, bays, marshes (primarily on waterbirds) and other wetland areas. Nests in protected cliff, ledges or manmade structures.	High Potential / Observed: No suitable breeding/nesting habitat is present within the Project area. Species may be seen foraging or soaring over Project area.
<i>Lanius ludovicianus</i> Loggerhead Shrike	None	CSC, BCC	Inhabit open woodland areas with short well-spaced vegetation, particularly those with spines or thorns.	High Potential / Observed: Has been observed and is known to occur within the Project area.
<i>Asio flammeus</i> Short-eared Owl	None	CSC	Migratory species that can be found in grasslands and open areas. They perch in low trees or on theythe ground.	High Potential / Observed: Has been observed and is known to occur within the Project area.
<i>Icteria virens</i> Yellow Breasted Chat	None	CSC	Habitat consists of dense growth along waterways	Moderate Potential: The mixed riparian forest along Patterson Slough may provide potential nesting / foraging habitat.
<i>Accipter striatus</i> Sharp-shinned Hawk	None	CWL	Habitat includes mixed or coniferous forests, deciduous woodlands, and thickets. Often nests within groves of coniferous trees in mixed woods, sometimes in dense deciduous trees or pure coniferous forests with brush or clearings nearby. Tends to avoid open country	High Potential: Known to occur in the neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest and/or ruderal grassland.

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<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Falco mexicanus</i> Prairie Falcon	None	CWL	Resident of open hills, plains, prairies, deserts. Typically found in fairly dry, open country, including grassland and desert. In winter can be found in farmland and around lakes and reservoirs, typically scarce around immediate coast.	High Potential: Has been rarely observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within ruderal grassland.
<i>Falco columbarius</i> Merlin	None	CWL	Habitat includes Open conifer woodland, prairie groves; in migration, also foothills, marshes, open country. Generally breeds in semi-open terrain having trees for nest sites and open areas for hunting. May winter in more open areas, such as grasslands, coastal marshes.	Moderate Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within ruderal grassland.
<i>Pandion haliaetus</i> Osprey	None	CWL	Rivers, lakes, coast. Found near water, either fresh or salt, where large numbers of fish are present. May be most common around major coastal estuaries and salt marshes, but also regular around large lakes, reservoirs, rivers. Migrating Ospreys are sometimes seen far from water, even over the desert.	Moderate Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within freshwater/saline seasonal wetlands or wetland mitigation area to the south of the site along Line P.
<i>Asio otus</i> Long Eared Owl	None	CSC	Woodlands, conifer groves. Favored habitat includes dense trees for nesting and roosting, open country for hunting. Inhabits a wide variety of such settings, including forest with extensive meadows, groves of conifers or deciduous trees in prairie country, streamside groves in desert. Generally avoids unbroken forest.	High Potential: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest along Patterson Slough, or within cottonwood stands in the southern portion of the Project Area.

EAST BAY REGIONAL PARK DISTRICT
 COYOTE HILLS RESTORATION & PUBLIC ACCESS PROJECT
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<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Dendroica petechia brewstri</i> Yellow warbler	None	CSC, BCC	Bushes, swamp edges, streams, gardens. In west, restricted to streamside thickets.	High Potential/Observed: Has been observed within neighboring Coyote Hills Regional Park. Project area may provide suitable foraging habitat within mixed riparian forest along Patterson Slough, or within cottonwood stands in the southern portion of the Project Area.
<i>Eremophila alpestris actia</i> California horned lark	None	CWL	Prairies, fields, airports, shores, tundra. Inhabits open ground, generally avoiding areas with trees or even bushes. May occur in a wide variety of situations that are sufficiently open: short-grass prairies, extensive lawns (as on airports or golf courses), plowed fields, stubble fields, beaches, or lake flats.	High Potential: migrant bird that has been observed infrequently within neighboring Coyote Hills Regional Park. Suitable foraging habitat may be present within the ruderal grasslands, or agricultural fields of the Project area.
<i>Empidonax traillii extimus</i> Southwestern Willow Fly Catcher	Federally Endangered State Endangered		Bushes, willow thickets, brushy fields, upland copses. Breeds in thickets of deciduous trees and shrubs, especially willows, or along woodland edges. Often near streams or marshes (especially in southern part of range).	Moderate Potential: species is a rare migrant but has been observed in neighboring Coyote Hills Regional Park. Project area may provide suitable habitat within the willow thickets / mixed riparian forest along Patterson Slough.
MAMMALS				
<i>Sorex vagrans halicoetes</i> Salt Marsh Wandering Shrew	None	CSC	Resident of high marshland (2-3 MASL) of the south San Francisco Bay that contains scattered driftwood.	No Potential: Suitable habitat is present in the salt marshes surrounding the Project area. Poor habitat suitability within the Project area, species documented less than 2 miles from Project area.

EAST BAY REGIONAL PARK DISTRICT
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<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Reithrodontomys raviventris</i> Salt Marsh Harvest Mouse	Federally Endangered State Endangered	CFP	Saline wetlands of the San Francisco Bay and its tributaries; associated with pickleweed	Low Potential: suitable marsh habitat (pickleweed) does not occur within the Project area/Park Expansion area. The species has been documented to occur in the saline seasonal wetlands north of Patterson ranch road, as well as to the west and south of the Project Area.
<i>Antrozous pallidus</i> Pallid Bat	None	CSC, WBWG High	Roosts along rocky outcrops, cliffs, oak trees, and is also known to utilize buildings and the underside of bridges as roosting sites.	Moderate Potential: Suitable roosting habitat is present within the Project area within, Patterson Slough riparian forest, the abandoned farm buildings, and under bridges crossing K and P line channels.
<i>Lasiurus blosevilli</i> Western Red Bat	None	CSC, WBWG High	Solitary species associated with roosting around riparian habitats. Roosts in tree foliage (willows, cottonwoods, and sycamores) and orchards. Known to be very tolerant of human activity.	Moderate Potential: Suitable habitat within Project area is present along K/P line channels, in mixed riparian forest stands of Patterson Slough, and in farm buildings.
<i>Myotis thysanodes</i> Fringed Myotis	None	WBWG High Priority	Resident of various woodland habitats roosting in crevice or caves. Forages over open habitats and water bodies.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest

EAST BAY REGIONAL PARK DISTRICT
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<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Myotis Volans</i> Long Legged Myotis	None	WBWG High Priority	Inhabitant of various woodland habitats surrounding bodies of water and open habitats. Roosts in crevices or caves.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest
<i>Corynorhinus townsendii</i> Townsend's Big-Eared Bat	None	CSC, WBWG High Priority	Migratory bat associated with various habitats throughout California including desert scrub, mixed conifer forest, or pine forest habitat... Specifically associated with limestone caves, mines, lava tubes, and buildings.	Moderate Potential: Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest
FISH				
<i>Oncorhynchus mykiss irideus</i> Steelhead (Central Coast ESU)	Federally Threatened NMFS		Very flexible life cycle patterns ranging from freshwater residents (non-migratory) to anadromous where adults travel upstream to the Russian river to spawn in cool, clear, well-oxygenated streams. Juveniles remain in these streams for at least 1 year before returning downstream through tributaries such as the Soquel Creek, or Pajaro River to the San Francisco and San Pablo Bay basins.	Low Potential: Unlikely to occur within the Project area, however the flood control channels of Alameda Creek Flood Control Channel are documented as being utilized by steelhead. These lands are outside of the Project area, but any pedestrian bridge crossing or encroaching into the flood plain of the channel will need to consider impacts to this protected species.

EAST BAY REGIONAL PARK DISTRICT
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<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
AMPHIBIANS				
<i>Actinemys marmorata</i> Western (Pacific) Pond Turtle	None	CSC	Resident of perennial ponds lakes, rivers and streams and even irrigation ditches. Requires suitable basking habitat (logs, floating vegetation) mud-banks, and a shelter that is submerged.	Moderate Potential: Pond turtles have been documented at the adjacent Coyote Hills Regional Park and at upstream (4.5 miles) sections of Alameda Creek. The species could potentially disperse into the Project area. Species has not been observed within the Project area; very limited egg laying sites are available.
<i>Rana draytonii</i> California Red-Legged Frog	Federally Threatened	CSC	Most common in lowlands or foothills. Found near ponds in humid forests, woodlands, grasslands, coastal shrub, and streamside with plant cover. Historically, found along the coast and Coast Ranges from Northern California to northern Baja California.	Low Potential: Suitable habitat is present, however, this species was not observed in the Project area during previous protocol biological surveys.
<i>Ambystoma californiense</i> California Tiger Salamander	Federally Threatened State Threatened	CWL	Resident of grasslands and low foothills with pools or ponds that are necessary for breeding.	Low Potential: Suitable habitat is present, however, this species was not observed in the Project area during previous protocol biological surveys.
INVERTEBRATES				
<i>Danaus plexippus</i> Monarch Butterfly	Federal Candidate	Roosts Protected by CDFW	Winter nesting habitat ranges from Mendocino to Baja California, Mexico along the California coast. Monarchs typically nest in wind protected groves (Eucalyptus, Monterey Pine, and Monterey Cypress) in locations with close proximity to nectar and water sources.	Moderate Potential: Documented roosting sites occur within 0.5 miles of the Project area and individuals may be observed during periods of the year foraging within the Project area. Mixed Riparian forest likely does not support a suitable habitat for roosting/overwintering.

EAST BAY REGIONAL PARK DISTRICT
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<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Lepidurus packardii</i> Vernal Pool Tadpole Shrimp	Federally Endangered		Reside in a wide variety of seasonal pools throughout the grasslands of the central valley. The water can be clear to murky and between 50-84 degrees Fahrenheit.	Low Potential: Marginal habitat is present, however, the species was not observed in the Project area during previous protocol biological surveys
<i>Branchinecta lynchi</i> Vernal Pool Fairy Shrimp	Federally Threatened		Reside in a wide variety of seasonal pools including vernal pools, alkali pools, seasonal drainages, stock ponds, vernal swales, and rock outcrops within grassland habitat.	Low Potential: Marginal habitat is present, however, the species was not observed in the Project area during previous protocol biological surveys

Key to Sensitive Wildlife Species Status Codes

	Federal
FE	Federal Endangered
FT	Federal Threatened
FD	Federal Delisted
FC	Federal Candidate
FBGE	Federal Bald Eagle and Golden Eagle Protection Act
BCC	USFWS Birds of Conservation Concern
MMPA	Species protected under the Marine Mammal Protection Act
NMFS	Species under the Jurisdiction of the National Marine Fisheries Service
WBWG	Western Bat Working Group (High or Medium) Priority Species
	State
CE	California Endangered
CT	California Threatened
CSC	California Species of Special Concern
CWL	California Watch List Species
CFP	California Fully Protected
CDE	California Candidate Endangered Species
Species Evaluations:	
No Potential: Habitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).	
Low Potential: Few of the habitat components meeting the species requirement are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The Species is not likely to be found on the site.	
Moderate Potential: Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.	
High Potential: All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.	
Observed: Species was observed on the site or has been recorded (i.e. CNDDDB, other reports) on the site recently.	

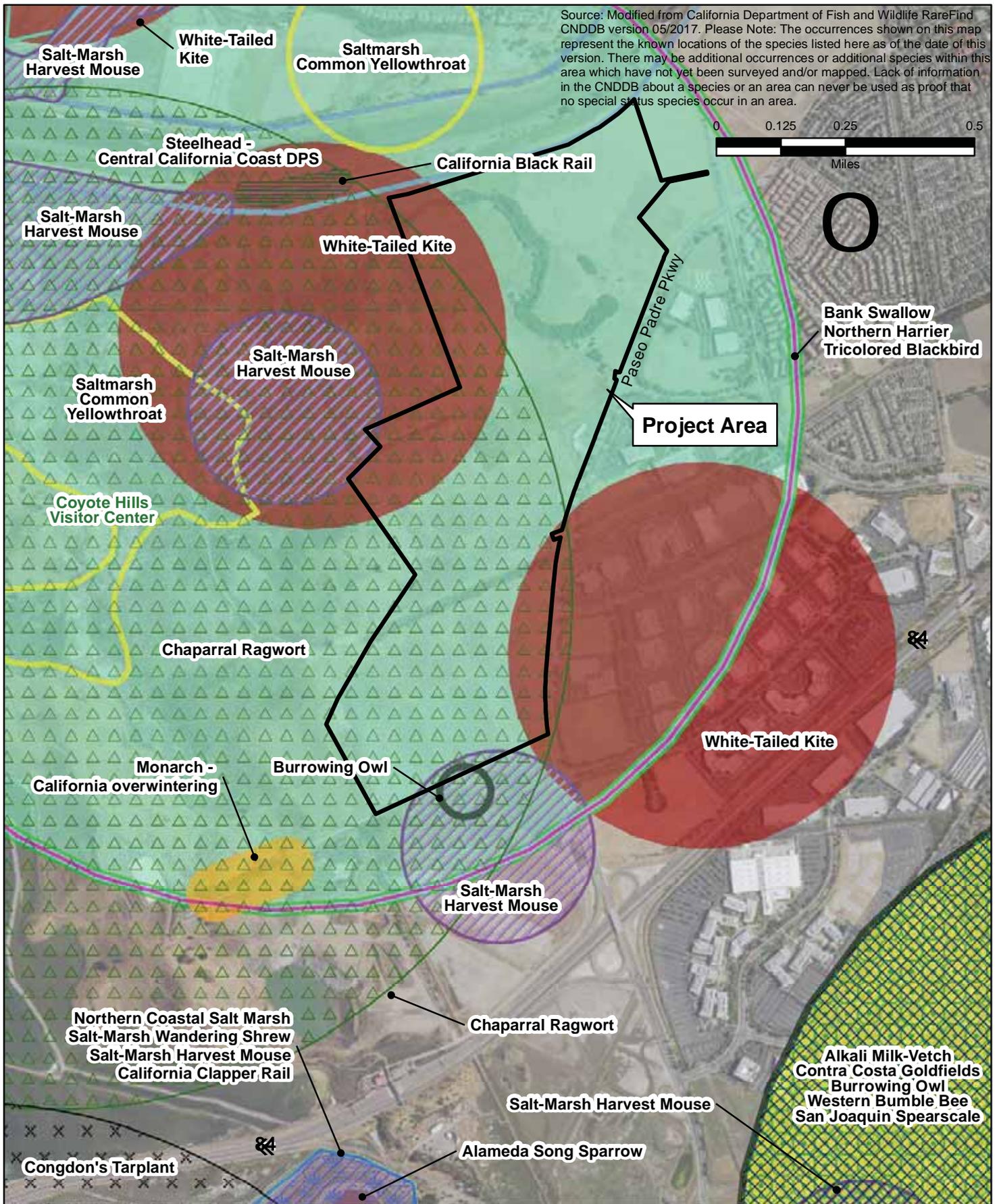


Figure 4.1-3

There are a total of 40 Special Status wildlife species that have a moderate or high potential to occur within or in close proximity to the Project area. Twenty of these Special Status wildlife species are either State/Federally threatened/ endangered or are of significant prominence within the Project area. The Special Status wildlife species include the following:

- Alameda song sparrow (*Melospiza molodia pusillula*)
- Bank swallow (*Riparia riparia*)
- Burrowing owl (*Athene cunicularia*)
- California black rail (*Laterallus jamaicensis coturniculus*)
- Golden eagle (*Aquila chrysaetos*)
- Loggerhead shrike (*Lanius ludovicianus*)
- Northern harrier (*Circus cyaneus*)
- Salt marsh common yellowthroat (*Geothlypis trichas sinuosa*)
- Short-eared owl (*Asio flammeus*)
- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Tri-colored blackbird (*Adelains tricolor*)
- White-tailed kite (*Elanus leucurus*)
- Salt marsh harvest mouse (*Reithrodontomys raviventris*)
- Fringed myotis (*Myotis thysanodes*)
- Long legged myotis (*Myotis volans*)
- Pallid bat (*Antrozous pallidus*)
- Townsend's big eared bat (*Corynorhinus townsendii*)
- Western red bat (*Lasiurus borealis*)
- Steelhead salmon (*Oncorhynchus mykiss*)
- Monarch butterfly (*Danaus plexippus*)

A number of Special Status Species surveys were conducted during the planning and environmental review work completed for the Patterson Ranch Planned District project as well as monitoring and observation conducted by the Project Biologist during the Phase I Ardenwood Creek Flood Control and Restoration Project. Previous biological surveys included:

- California Red-Legged Frog (CRLF) surveys of Patterson Slough and Line P by Pacific Biology (Sept. 2007) and H.T. Harvey (Aug. 2001). No CRLF found, although potential suitable habitat was identified.
- California Tiger Salamander (CTS) by and H.T. Harvey (Aug. 2003) and Condor Country Consulting (2003). No CTS found.
- Vernal Pool Fairy Shrimp (VPFS) by Condor Country Consulting (Nov. 2003) and Helm Biological Consulting (Feb. 20014). No VPFS or Federally listed large branchiopods found.
- Burrowing owl (BO) by Pacific Biology (July 2007) and H.T. Harvey (Aug. 2001). No BO were found, but were known to have been historically present and observed south of Project area.
- Hawks and other Birds of Prey observed by H.T. Harvey 2001, 2002, 2003) included red tailed hawk, Northern Harrier, and White-tailed kite, which were all observed foraging on site or nearby areas.

Based on the above biological investigations it was determined that the Park Expansion area may provide nesting and foraging habitat for a number of Special Status species listed above. The overall Project Area provides foraging grounds for the peregrine falcon, and numerous other raptors listed

by the State as Species of Special Concern. The wetlands and winter ponded areas also serve as nesting, foraging, resting and migratory stop over areas for numerous bird species, especially wading birds, shorebirds, and waterfowl.

Select Special Status wildlife species that were observed, or have moderate to high potential to occur on or near the project site, based on the Biological Resources Assessment and Shuford and Gardali²⁰, are discussed below.

Birds

Alameda Song Sparrow (*Melospiza molodia pusillula*) – CDFW Species of Special Concern, USFWS Bird of Conservation Concern

Alameda Song Sparrow inhabit salt, fresh, and brackish marshes and the moist, brushy, and weedy edges of these habitats and are present along eastern and southern San Francisco Bay salt marshes. Roosts in low lying marsh vegetation, high enough to avoid flooding during high tides. This song sparrow will avoid areas where water is stagnant and/or tidal flow is obstructed.²¹ Suitable foraging and nesting habitat is available on the project site.

Bank Swallow (*Riparia riparia*) – State Threatened, California Threatened

Bank swallows (*Riparia riparia*) have a very wide distribution throughout the world, but in California are concentrated primarily along the Sacramento and Feather rivers. Their nesting habitat consists of vertical caves, sand banks, and along marshes and river banks. Within the Project area, this species are known to occur to the west within Coyote Hills Regional Park; however observed occurrences are rare and they have not been observed or confirmed to be present within the Project area.

Burrowing Owl (*Athene cunicularia*) – CDFW Species of Special Concern

Burrowing Owl (BO) are endemic to the grasslands, rangelands, disturbed agricultural areas, and deserts of North America. BO nest and roost within underground burrows such as those excavated by ground squirrels, prairie dogs, and gophers. Nesting season begins in late March or April. Unlike other owls, the BO is frequently active during the day but accomplish the majority of their hunting at night, preying upon small rodents, and insects. BO has been observed within the Project area, and in the neighboring Coyote Hills Regional Park. The ruderal grasslands, and agricultural fields within the Project Area provide suitable nesting and foraging habitat for this species.

Non-Special Status species of swallow are more commonly observed within the Project area, and include: cliff swallow (*Petrochelidon pyrrhonota*), tree swallow (*Tachycineta bicolor*), and barn swallow (*Hirundo rustica*) species. Cliff swallows (a non-listed migratory species) were observed nesting within the Paseo Padre Parkway – Ardenwood Creek/Line P culvert during Pre-construction Biological surveys completed for the ACFCWCD Phase 1 Flood Control and Wetlands Mitigation Area project 2016. These cliff swallow nests are protected under the Migratory Bird Treaty Act of 1918 Section 703 and were accordingly protected from disturbance during construction of the culvert.

California Black Rail (*Laterallus jamaicensis coturniculus*) – State Threatened, CDFW Fully Protected, USFWS Bird of Conservation Concern. Low Potential.

California black rail (CBR) are endemic to California's coastal salt and brackish marsh habitats ranging from Bodega Bay to Morro Bay, with some populations known to occur within inland freshwater marshes. Within the San Francisco Bay, CBR is known to occur within habitat that ranges from salt marshes dominated by pickleweed (*Salicornia spp.*), salt grass (*Distichlis spicata*), and cord grass

²⁰ Shuford, W.D., and Thomas Gardali. 2005. *California Bird Species of Special Concern*. Western Field Ornithologists, Camarillo, CA, and California Department of Fish and Game, Sacramento, CA.

²¹ W.D. Shuford, 1993. *The Marin County Breeding Bird Atlas: A Distributional and Natural History of Coastal California Birds*, California Avifauna Series 1. Bushtit Books, Bolinas, CA.

(*Spartina foliosa*) to brackish marsh dominated by bulrush (*Scirpus spp.*), tule (*Schoenoplectus acutus*), and cattail species (*Typha spp.*). Nesting for CBR occurs from March through July, with the height of nesting activities occurring in April/May. Within the Project area CBR has been documented to occur within the pickleweed and bulrush dominated marshes to the northwest of the Park Expansion area, just outside of the willow thickets along lower Alameda Creek. There is a low potential for the CBR to occur near the portion of the Project area where Patterson Ranch Road and Tuibun Trail improvements are proposed.

Golden Eagle (*Aquila chrysaetos*) – (FBGE, CFP, CWL, BCC)

Golden Eagles are widespread throughout the western United States, and prefer secluded cliffs or rocky areas with overhanging ledges. Golden Eagles also utilize large trees such as large oaks (*Quercus sp.*) and western sycamores (*Platanus racemosa*) for nesting and cover. The preferred habitat for the Golden Eagle includes areas that have favorable sites for nesting as well as a dependable food supply, with large open space grassy areas for foraging. Nest site is most often on cliff ledge, also frequently in large tree, rarely on ground. Sites may be used for many years. A pair may have 2 or more alternate nest sites, using them in different years. Nest (built by both sexes) a bulky platform of sticks, lined with weeds, grass, leaves, moss. New material added each year, and nest may become huge. Golden Eagles are known to occur within the adjacent Coyote Hills regional Park although no golden eagle nests have been observed within the LUPA Project area.

Loggerhead Shrike (*Lanius ludovicianus*) – CDFW Species of Special Concern, USFWS Bird of Conservation Concern

The loggerhead shrike is a common resident and winter visitor in lowlands and foothills throughout California. It prefers open habitats with scattered trees, shrubs, posts, fences, utility lines, or other perches. Nests are usually built on a stable branch in a densely-foliaged shrub or small tree and are usually well-concealed. While this species eats mostly Arthropods, they also take amphibians, small to medium-sized reptiles, small mammals and birds; and are also known to scavenge on carrion. Suitable breeding habitat is available for this species in the trees and shrubs on the project site.

Northern Harrier (*Circus cyaneus*) – CDFG Species of Special Concern

Harrier are residents of wetlands, including marshy meadows; wet, lightly grazed pastures; fallow fields; and freshwater and brackish marshes. They also frequent dry uplands, including upland prairies, mesic grasslands, drained marshlands, croplands, cold desert shrub-steppe, and riparian woodland throughout California.²² Harrier typically nest on the ground in open (treeless) habitats in dense, often tall, vegetation. They choose an extremely varied choice of vegetative cover, even within a single area. Soil types where nests have been observed include drained and non-drained wetlands as well as uplands. The project site contains suitable foraging and marginal nesting habitat for this species, which is known to occur within the Project area.

Salt Marsh Common Yellowthroat (*Geothlypis trichas sinuosa*) – USFWS Bird of Conservation Concern, CDFW Species of Special Concern

This subspecies of the common yellowthroat (*G. trichas*) is found in freshwater marshes, coastal swales, riparian thickets, brackish marshes, and saltwater marshes. Their breeding range extends from Tomales Bay in the north, Carquinez Strait to the east, and Santa Cruz County to the south. This species requires thick, continuous cover such as tall grasses, tule patches, or riparian vegetation down to the water surface for foraging and prefers willows for nesting. Suitable nesting habitat is available in the cordgrass patches and the taller vegetation nearest the marsh habitat on the project site.

²² MacWhirter, R.B. and K.L. Bildstein, 1996, *Northern Harrier (Circus cyaneus)*, in *The Birds of North America*, No. 210 (A. Poole and F. Gill, eds.), The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C.

Short-eared Owl (*Asio flammeus*) – CDFW Species of Special Concern

Short-eared owl inhabit wide open spaces such as grasslands, prairie, agricultural fields, salt marshes, and estuaries. Short-eared owl eat mainly small mammals, but will also eat birds or insects. Unlike most owls, short-eared owl nest on the ground. Breeding habitat must have sufficient ground cover to conceal nests and nearby food sources of small mammals. Communal winter roosts occur in fields, shrubs, in overgrown rubble in abandoned fields, or in clumps of dense conifers. Nests are usually situated in the shelter of a grass mound or among herbaceous ground cover. Young grow rapidly after hatching, an adaptation to reduce the amount of time they are vulnerable to predation. Short-eared owl routinely lay replacement clutches, because of high predation rates, and may raise two broods in one year. The short-eared owl is highly migratory and nomadic.²³

The seasonal wetlands, nearby annual grasslands and small shrubs at the site provide suitable breeding and foraging habitat for this species, and it has been observed to occur to the west in Coyote Hills Regional Park.

Southwestern Willow Flycatcher (*Empidonax traillii extimus*) (Federally Endangered, State Endangered)

Southwestern Flycatcher are known to utilize habitat within and adjacent to the Project area ranging from mixed riparian and willow thicket, ruderal grasslands, oak woodland areas, and seasonal wetland habitat for foraging and nesting, with the raptors also using the ruderal grassland areas for foraging.

Tricolored Blackbird (*Agelaius tricolor*) – USFWS Bird of Conservation Concern, CDFW Species of Special Concern

This species breeds to the west in Coyote Hills Regional Park, within riparian scrubland, tules/willow/cattail thickets, and within freshwater marshes. Emergent freshwater thickets along Patterson Slough, K-line, and P-line channels also provide nesting habitat.

White-tailed Kite (*Elanus leucurus*) – CDFG Fully Protected Species

Kite occur in low elevation grassland, agricultural, wetland, oak woodland, and savannah habitats. Riparian zones adjacent to open areas are also used. Vegetative structure and prey availability seem to be more important than specific associations with plant species or vegetative communities. Lightly grazed or ungrazed fields generally support large prey populations and are often preferred to other habitats. Kites primarily feed on small mammals, although, birds, reptiles, amphibians, and insects are also taken. Nest trees range from single isolated trees to trees within large contiguous forests. Preferred nest trees are extremely variable, ranging from small shrubs (less than 10 feet tall), to large trees (greater than 150 feet tall).²⁴ Suitable foraging habitat for this species exists in the marsh habitat and grasslands. Nesting habitat exists in the trees and bushes throughout the site.

Small Mammals

Salt Marsh Harvest Mouse (*Reithrodontomys raviventris*) – Federally Endangered, State Endangered, and CDFW Fully Protected. High Potential

Salt marsh harvest mouse (SMHM) is endemic to the salt and brackish marsh habitat of the greater San Francisco Bay, Suisun Bay, and San Pablo Bay ecotone. The primary habitat associated with SMHM is pickleweed (*Salicornia spp.*) dominated tidal marsh and seasonal wetlands; however more recent studies have shown that SMHM populations are also supported by a more mixed-vegetation habitat, including areas of more open pickleweed and native and non-native grasses. SMHM typically inhabits areas where vegetation is deep, dense, and typically between 11.8 and 23.6 inches in height, although shorter stands and more open areas of pickleweed in seasonal wetlands also provide suitable

²³ Long, K., 1998. *Owls: A Wildlife Handbook*. Johnson Books.

²⁴ Dunk, J.R., 1995, *White-tailed Kite (Elanus leucurus*, in *The Birds of North America*, No. 178 (A. Poole and F. Gill, eds.), The Academy of Natural Sciences, Philadelphia, and The American Ornithologists' Union, Washington, D.C.

habitat for this species. Presence of uplands, as tidal refuge is an essential feature of SMHM habitat, as these higher elevation areas provide an escape from high tide, storm events, and ponding.

SMHM has been documented to occur within the western portion of Project area along Patterson Ranch Road, generally west of the kiosk, and also to the south of the Park Expansion Project area.²⁵ Because of the presence of suitable habitat and historically documented occurrences, there is a high potential for the SMHM to occur near the portion of the Project area where Patterson Ranch Road and Tuibun Trail improvements are proposed.

Bats

Park District staff at Coyote Hills report observing at dusk on many days of the year, a large population of various bat species that utilize the marshes and ponded areas of the Regional Park. These bats feed upon the abundant insect populations within the marsh, and likely roost in the wooded areas of the hills, old farm buildings, under bridges, as well as within the large trees of the riparian corridor along Patterson Slough.²⁶

Bats can be broadly grouped into three categories based on their roosting habits: 1) solitary bats that roost only in tree foliage or bark such as western red-bat (*Lasiurus blossevilli*), or hoary bat (*Lasiurus cinereus*), 2) tree-roosting bats that form groups or colonies of varying size in tree cavities or within loose bark, such as silver-haired bats (*Lasiomycteris noctivagans*), and 3) bats that utilize a wide variety of roosts, including old buildings, under bridges and tree cavities. Examples of these include fringed Myotis (*Myotis thysanodes*), and pallid bat (*Antrozous pallidus*).

Solitary-roosting bats can consist either of lone females, as females with young bats, or they can occur as solitary males. Colonial-roosting bats can form large maternity colonies in large tree cavities, mines, under bridges, or in buildings. During the day, roosts provide shelter for adult females and their young. At night the young bats would remain in their roost while their mother bats forage before returning to nurse and care for their young. Old abandoned buildings often provide important roosting habitat for various Special Status bat species such as pallid bat (*Antrozous pallidus*), and Townsend's big-eared bat (*Corynorhinus townsendii*), as well as more common species such as Mexican or Brazilian free-tailed bat (*Tadarida brasiliensis*).

Non-Special Status bats that are common to Alameda County include: hoary bat (*Lasiurus cinereus*), silver-haired bats (*Lasiomycteris noctivagans*, and Brazilian free-tailed bat (*Tadarida brasiliensis*). These bats are considered by CDFW as Special Animals (per CNDDDB Special Animal List) and along with other non-game mammals are protected by the California Fish and Game Code.

Special Status bats that may have potential to occur within the Project area include: pallid bat (*Antrozous pallidus*) (CSC, and Western Bat Working Group-WBWG High Priority), western red bat (*Lasiurus blossevilli*) (CSC, WBWG High Priority), fringed myotis (*Myotis thysanodes*) (CSC, WBWG High Priority), long legged Myotis (*Myotis volans*) (CSC, WBWG High Priority), and Townsend's big-eared bat (*Corynorhinus townsendii*), (CSC WBWG High Priority). These are discussed below.

Fringed Myotis (*Myotis thysanodes*) (CDFW Species of Special Concern, WBWG High Priority)

The Fringed Myotis occurs from sea-level to 900 feet elevation but is most common at middle elevations 350 to 700 feet. Distribution is patchy. It appears to be most common in drier woodlands (oak, pinyon-juniper, ponderosa pine) but is found in a wide variety of habitats including desert scrub, mesic coniferous forest, grassland, and sage-grass steppe. Forages over open habitats and

²⁵ Mills Associates and Questa Engineering Corporation. 1990. *Draft Wetlands Enhancement & Restoration Plan for Coyote Hills Regional Park*. Unpublished Report prepared for East Bay Regional Park District.

²⁶ Western Bat Working Group. Species Matrix. Available online at <http://wbwg.org/matrices/species-matrix/>. Accessed February 2019.

water bodies. Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest.

Long Legged Myotis (*Myotis volans*) (WBWG High Priority)

Long Legged Myotis live in various habitats which include: ponderosa pine woodlands, coniferous forests, pinyon-juniper woodlands, oak woodlands, mountain meadows and riparian zones. They have been captured in desert habitats as well. In mountainous areas, they prefer mid-slope elevations where there is an abundance of food. Suitable roosting habitat present within Project area within abandoned farm buildings, bridges, and/or trees within the oak woodland.

Pallid Bat (*Antrozous pallidus*) (CDFW Species of Special Concern WBWG High Priority)

Pallid Bats roost along rocky outcrops, cliffs, oak trees, and are also known to utilize buildings and the underside of bridges as roosting sites. Suitable roosting habitat may be present within the Project area within Patterson Slough riparian forest, the abandoned farm buildings, and under bridges crossing K and P line channels.

Townsend's Big Eared Bat (*Corynorhinus townsendii*) (CDFW Species of Special Concern, WBWG High Priority)

Townsend's Big Eared Bat (TBEB) has been reported in a wide variety of habitat types ranging from sea level to 1,000 feet. Habitat associations include: coniferous forests, mixed meso-phytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types. Suitable roosting habitat is present within Project area within abandoned farm buildings, bridges, and/or trees within Patterson Slough mixed riparian forest.

Western Red Bat (*Lasiurus borealis*) (CDFW Species of Special Concern, WBWG High Priority)

The Western Red Bat (WRB) is a solitary species associated with roosting around riparian habitats. Roosts in tree foliage (willows, cottonwoods, and sycamores) and orchards. WRB is known to be very tolerant of human activity.

Fish

Steelhead Salmon (*Oncorhynchus mykiss irideus*) (Federally Threatened)

Steelhead salmon are known to occur in the lower Alameda Creek Flood Control Channel, and have been observed to be present as recently as 2016. Steelhead salmon are unlikely to occur within the Project area, but any pedestrian bridge crossing or encroaching into the flood plain of the Alameda Creek channel will need to consider impacts to this protected species.

Insects

Monarch Butterfly (*Danaus plexippus*) (Federal Candidate) (Roosts CDFW Protected)

The Monarch Butterfly (MB) is a CDFW Special Status species and current candidate for listing as a federally endangered species, has a moderate potential to occur within the Project area. The Monarch Butterfly (MB) has been documented to occur within the eucalyptus groves of the neighboring Ardenwood Historic Farm, and could potentially use the Project area for nectar foraging. It is unlikely that the mixed riparian woodland habitat of the Project area supports a suitable microclimate for MB roosting, and there are no known MB roosting sites within the Project area or adjacent Coyote Hills Regional Park. Roosting sites of MBs can consist of thousands or millions of butterflies on a tree or group of trees; it is these roosting areas that are currently protected by the CDFW.

The MB is listed on the CDFW Special Animals list (CDFW, 2018b) and has a conservation status of "vulnerable to imperiled" from the Xerces Society for Invertebrate Conservation. Over the last several dozen years and based on annual winter counts at known over-wintering sites, researchers

with the Xerces Society have estimated that the MB population has declined by over 50 percent in coastal California²⁷.

Monarch Butterflies engage in a fall migration that takes approximately 85 days and requires multiple generations of butterflies to complete. Starting around October, MBs fly from central and northern parts of the United States and parts of Canada to Mexico and the coast of California, as far north as Mendocino County. The final generation of migrating MBs aggregate in clusters, high in trees at over-wintering sites. Overwintering sites in coastal California commonly include groves of Eucalyptus, Monterey Pine (*Pinus radiata*), and Monterey Cypress (*Hesperocyparis macrocarpa*). These groves have special micro-climates that protect MB from strong winds, rain, and cold weather. In February and March, the surviving MBs breed at the overwintering sites before dispersing.

Special Status Plant Species

Special Status plant species are shown in **Table 4.1-2** and **Figure 4-1.3**, listing those that occur on lists 1 and 2 of the California Native Plant Society (CNPS) - California Rare Plant Rank (CRPR).

TABLE 4.1-2 SPECIAL STATUS PLANT SPECIES

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Centromadia parryi</i> <i>ssp. congdonii</i> Congdon's tarplant	None	CNPS Rank 1B.1	Endemic to foothill and valley grasslands. Prefers alkaline soils with white clay present at elevations between 0-750 ft. above sea level.	High Potential/Present: Project area has a suitable habitat and is located within the range of the species. Species was observed during the Fall of 2016 within the southern part of the Project area south of Line P.
<i>Ettiplex joaquinana</i> San Joaquin spearscale	None	CNPS Rank 1B.2	Endemic to meadows, chenopod scrub, seeps, valleys and foothill grasslands that contain alkaline soils. Elevation range 0-2715ft. and blooms between April and October.	High Potential/Present: Project area contains suitable habitat for this species, and was observed during the Fall of 2016 within the southern part of Project area south of Line P.

²⁷ Xerces Society for Invertebrate Conservation (Xerces). State of the Monarch Butterfly Overwintering Sites in California, prepared for the U.S. Fish and Wildlife Service. Available online at: http://www.xerces.org/wp-content/uploads/2016/07/StateOfMonarchOverwinteringSitesInCA_XercesSoc_web.pdf. Accessed December 2018.

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<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Atriplex minuscula</i> Lesser saltscale	None	CNPS Rank 1B.1	Endemic to meadows, chenopod scrub, seeps, valleys and foothill grasslands that contain sandy, alkaline soils. Elevation distribution between 45-650 ft. Blooms May - October.	High Potential/ Present: Project area contains suitable habitat for this species, and was observed during the Fall of 2016 within the southern part of Project area south of Line P.
<i>Eryngium aristulatum var. hooveri</i> Hoover's button celery	None	CNPS Rank 1B.1	Resident to vernal pools, alkaline depressions and ditches. Elevation range 10-150 feet. Blooms between July and August.	Moderate Potential: Project area has potentially suitable (alkaline wetland) habitat. Species was observed in Project vicinity
<i>Phalaris arundinacea</i> Canary Grass, Reed	None	CNPS Rank 1B.1	Perennial grass that is native to California. Typically occurs within wetland habitats, but can also occur outside of wetlands. Known to inhabit valley grassland, foothill woodland, chaparral, yellow pine forest, or wetland riparian habitats.	Moderate Potential: Observed in nearby Coyote Hills Regional Park and may be present within the upland chaparral or wetland habitats within the Project area.
<i>Sparganium eurcarpum ssp. eurycarpum</i> Bur-Reed, Broad Fruit	None	A1	Perennial member of the bur reed family that spreads by rhizomes. Typically occurs in areas with ponding or seasonal flooding. Rhizomes can survive periods of drought.	Moderate Potential: Occurs in the neighboring Coyote Hills Regional Park, potential habitat may exist within the seasonal wet lands in the south portion of the Project area.
<i>Sparganium erectum ssp. stoloniferum</i> Bur-Reed, Erect	None	A1	Perennial member of the bur reed family that spreads by rhizomes. Native to herbaceous marsh, and occurs with ponding or seasonal flooding.	Moderate Potential: Occurs in the neighboring Coyote Hills Regional Park, potential habitat may exist within the seasonal wet lands in the south portion of the Project area.

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<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Astragalus tener var. tener</i> Alkali milk-vetch	None	CNPS Rank 1B.2	Annual herb that blooms March through June. Occurs in low ground alkali flat and flooded lands in alkali playa. Documented to occur 2 miles southeast of Project area.	Moderate Potential. Project area may contain suitable habitat within slightly alkaline seasonal wetlands in the southern portion of the Project Area. Not observed during previous rare plant survey of 2016.
<i>Navarretia prostrate</i> Prostrate Navarretia	None	CNPS Rank 1B.1	Annual herb that blooms from April to July. Typically occurs within alkaline, mesica areas in coastal scrub, valley grassland, and vernal pools from 10-2,100 feet in elevation. Occurs in Don Edwards National Wildlife Refuge.	Moderate Potential: Project area may contain suitable habitat within the saline seasonal wetlands or in the southern portion of the Project Area. Not observed during previous rare plant survey of 2016.
<i>Plagiobothrys glaber</i> Hairless popcornflower	None	CNPS Rank 1A	Annual herb that blooms from March to May. Typically occurs in alkaline grassy areas in meadow and coastal salt marsh habitat at elevations between 0-15, 45 ft. Species has been observed within 5 miles of the Project area in Hayward, and Union City.	Low Potential: Project area may contain suitable habitat within the saline/alkaline seasonal wetland drainage ditch in southern portion of the Project area. Not observed during previous rare plant survey of 2016.

<i>Scientific Name</i> Common Name	Federal / State Status	Other Status	Habitat Association	Potential for Occurrence in Project area
<i>Trifolium hydrophilum</i> Saline clover	None	CNPS Rank 1B.2	Annual Herb that blooms from April to June. Typically occurs within mesic, alkaline sites in marshes, swamps, valleys, foothill grasslands, and vernal pool habitats at elevations ranging from 0-1,495 ft. Was observed three miles east of the Project area in Newark in 2013.	Moderate Potential: Project area may contain suitable habitat within the saline/alkaline seasonal wetland drainage ditch in southern portion of the Project area. Not observed during previous rare plant survey of 2016. Species was recorded three miles east of the Project area in Newark in 2013.

Key to Status Codes

List 1A	CNPS List 1A: Plants presumed extinct in California
List 1B	CNPS List 1B: Plants rare, threatened or endangered in California and elsewhere
List 2	CNPS List 2: Plants rare threatened or endangered in California, but more common elsewhere.
Special Plant Status according to CNDDDB*	*A – listed as rare, threatened or endangered statewide (includes A1*) A1 - Known from 2 or less botanical regions in the 2 counties A1x – Believed to be extirpated in the 2 counties A2 – Known from 3-5 regions or if more = important
Threat Rank	0.1 - Seriously Threatened in California (Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat) 0.2 - Fairly threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat) 0.3 - Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Species Evaluations:

No Potential: Habitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
Low Potential: Few of the habitat components meeting the species requirement are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The Species is not likely to be found on the site.
Moderate Potential: Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
High Potential: All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
Observed: Species was observed on the site or has been recorded (i.e. CNPS, other reports) on the site recently.

* As mentioned in Coyote Hills 2005 Initial Study/Mitigated Negative Declaration

Adjacent Coyote Hills Regional Park. According to the 2005 Coyote Hills Regional Park Land Use Plan (LUP) and accompanying CEQA document, and based on information obtained from the California Natural Diversity Database (CNDDDB), California Native Plant Society (CNPS), and Calflora, six Special Status plant species have been previously reported as being present in the Coyote Hills Regional Park, west of the Park Expansion Project area and have moderate or high potential to occur in the saline seasonal wetlands near Patterson Ranch Road:

- Rayless ragwort (*Senecio aphanactis*), is a CNPS 2B.2 species and is considered to be rare, or endangered in California, but more common elsewhere. This plant is found in alkali marsh and grassland. Rayless ragwort was last reported in Coyote Hills in 1892 (sic) and very likely no longer occurs there.
- Greene's or erect bur-reed (*Sparganium erectum ssp. stoloniferum*), is listed by Dianne Lake's Unusual and Significant Plants of Alameda and Contra Costa Counties as A1. This freshwater marsh and wetland species is currently known from only two areas in Alameda and Contra Costa Counties and was listed as present confirmed in the 2005 Coyote Hills LUP and CEQA document.
- Broad fruit bur-reed (*Sparganium eurcarpum ssp. eurcarpum*) is also on Lake's List as an A1 plant, and occurs in the freshwater marsh and wetland areas. This plant was also confirmed as being present in the 2005 LUP, but was not observed during the 2016 Rare Plant Survey by Jane Valerius.

Three of the Special Status plants that are known to occur in saline seasonal wetlands within the adjacent Regional Park are Lake's List A2 species, and are known from three to five botanical regions within Alameda and Contra Costa Counties. They include:

- Saltmarsh spikeweed (*Hemizonia pungens ssp. aritime*) in the salt marsh
- Parish's wheat-grass (*Elymus stebbinsii*) on the dry, open slopes (and not likely to occur in the Project area)
- Reed canary grass (*Phalaris arundinacea*) in riparian and wetland areas.

There is a potential for these plants to occur in saline seasonal wetlands north of Patterson Ranch Road and west of the Park kiosk, but their presence was not confirmed as part of the LUPA botanical surveys.

Park Expansion Project Area. During previous rare plant surveys conducted within the Park Expansion Project area as part of the proposed Patterson Ranch Development Project EIR, no rare plants were observed. The authors of the EIR thought Special Status plants were unlikely to be present in ruderal and weedy fallow farm fields or agricultural lands. No rare plants were observed during the field work conducted for the preliminary wetlands determination for the Project area north of Ardenwood Creek, but a thorough botanical survey was not completed.

A Rare Plant Survey was conducted by Jane Valerius, Consulting Botanist and Wetlands Scientist, that covered the area south of Ardenwood Creek within the Park Expansion area on June 27, 2016, prior to the construction of the Ardenwood Creek (Line P) Phase I flood control improvement Project by ACFCWCD. This survey resulted in the discovery of three associated species of the pickleweed (*Sarcoconia pacifica*) alliance within the southern portion of the Project area in an area of historic alkali vernal pool habitat. These plants include Congdon's Tarplant (*Centromadia parryi ssp. congdonii*), Lesser Saltscale (LS) (*Atriplex minuscula*), and San Joaquin Spearscale (SS) (*Extriplex joaquinana*). All of these plants are ranked by the CNPS as 1B (plants rare, threatened, or endangered in California and elsewhere) in California. Seed from these plants were collected and are being stored for use in wetlands restoration of this area.

Descriptions of these plants are provided below:

Congdon's Tarplant (*Centromadia parryi ssp. Congdonii*) (CNPS 1B.1)

This species is endemic to foothill and valley grasslands. It prefers alkaline soils (white clay) present at elevations between 0-750 ft. above sea level. The Project area has a suitable habitat and is located within the range of the species. This species was observed during the fall of 2016 within the southern part of the Project area, south of Ardenwood Creek/Line P in the Southern Wetlands Natural Unit.

Lesser saltscale (*Atriplex minuscula*) (CNPS 1B.1)

This species is endemic to meadows, chenopod scrub, seeps, valleys and foothill grasslands that contain sandy, alkaline soils. Elevation distribution between 45-650 ft. and blooms May - October. The Project area contains suitable habitat for this species, and was observed during the fall of 2016 within the WMA part of Project area south of Line P.

San Joaquin spearscale (*Etriplex joaquinana*) (CNPS 1B.2)

This species is endemic to meadows, chenopod scrub, seeps, valleys and foothill grasslands that contain alkaline soils. It occurs at elevation range 0-2715ft. and blooms between April and October. The Project area contains suitable habitat for this species, and was observed during the fall of 2016 within the WMA part of Project area south of Ardenwood Creek in Line P.

In addition to the above Special Status plants as being confirmed as present in the Southern Wetlands Natural Unit, four other Special Status plants associated with alkali wetlands were determined to have some potential to occur in this area, but were not observed during Jane Valerius' 2016 Rare Plant Survey:

- **Hoover's button celery (*Eryngium aristulatum* var. *hooveri*)**
- **Alkali milk-vetch (*Astragalus tener* var. *tener*)**
- **Prostrate navarretia (*Navarretia prostrate*)**
- **Saline clover (*Trifolium hydrophilum*)**

Standards of Significance

The baseline for determining the significance of potential impacts under CEQA, for the purposes of this Draft EIR, is the existing condition of the Project area.

Biological resource impacts associated with the project would be considered significant if the Project would:

- 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, 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, seasonal wetland, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.
- d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- e. Conflict with applicable 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.

Assessment Methodology

Methods

General information about Project area biological resources were obtained through a review of published and un-published literature, through general and focused field surveys, and by consultation with biologists and Park District staff knowledgeable about the biology of the Coyote Hills area.

Information on Special Status plant and wildlife species was compiled through a review of the California Natural Diversity Database 2018 Database (CNDDDB 2018a) for the Newark 7.5-minute topographic quadrangle, the California Department of Fish and Wildlife's (CDFW) Special Animals List (CDFW, 2018b), State and Federally Listed Endangered and Threatened Animals of California (CDFW, 2018c), California Bird Species of Special Concern (Shuford and Gardali, ed. 2005) the California Native Plant Society's on-line electronic inventory of rare and endangered plants of California, and the USFWS Information on Planning and Conservation (IPaC) list (USFWS, 2018).

Previous general reports on the biological resources of the Project area that were reviewed and as appropriate incorporated into Biological Resources Assessment and this analysis included the following:

- Mills Associates Planning and Environmental Services with Questa Engineering, Inc., for East Bay Regional Park District. 1990. "Wetlands Enhancement & Restoration Plan for Coyote Hills Regional Park." June 7, 1990.
- East Bay Regional Park District- *Initial Study and Proposed Mitigated Negative Declaration for Coyote Hills Regional Park Land Use Plan*, February, 2005
- East Bay Regional Park District- *Coyote Hills Regional Park Land Use Plan*, April, 2005
- East Bay Regional Park District- *Initial Study and Proposed Mitigated Negative Declaration for Demonstration Urban Stormwater Treatment Marsh Restoration Project, Coyote Hills Regional Park, Fremont, C.A.* February, 2005
- H.T. Harvey Associates. *Patterson Ranch Biological Opportunities and Constraints Analysis, April*, 2004.
- Circle Point, *Final Environmental Impact report Volume 1- Modified Recirculated Draft EIR- Patterson Ranch Planned District*. City of Fremont. Sept 2010.
- Circle Point. *Addendum to the Patterson Ranch Planned District.EIR*. City of Fremont. Sept 2013.
- WRA, Inc. *Biological Resources Assessment Report, Ardenwood Creek Flood Protection and Restoration Project, Fremont, Alameda County, California*. October 2013.

In addition to these general biological surveys and reports, a number of Special Status Species Surveys were also completed associated with the proposed Patterson Ranch Planned District EIR, and are referenced in the section on Special Status Species (see p. 90)

Site Survey for Wildlife: Samuel McGinnis, PhD, conducted a general survey of the Project area on several occasions during the spring, summer and fall of 2016, updating his knowledge of the area from his prior research for "Wetlands Enhancement & Restoration Plan for Coyote Hills Regional Park", prepared in 1990. The field surveys focused on the animal species reported in the CNDDDB.

Rare Plant Surveys: Jane Valerius conducted special status plant surveys for the Southern Wetlands Natural Unit, south of Ardenwood Creek on September 1, 2016. A list of special status plant species reported in the CNDDDB was compiled and reviewed prior to the field surveys. Observations for

potential rare plants for the remained of the Project area were completed by Valerius associated with preliminary jurisdictional wetlands fieldwork.

Wetland Delineation. Jane Valerius conducted a wetland delineation to identify potential areas that are subject to the U. S. Army Corps of Engineers (USACE) on April 11, 2017 and May 2, 2017. The USACE wetland definition was based on a three-parameter definition which requires that there be a dominance of wetland plants, presence of wetland soils, and presence of wetland hydrology.

Historical Ecology. Information on the Historical Ecology and historic creeks and drainage conditions of the Project area were obtained from the San Francisco Estuary Institute's *Alameda Creek Historical Ecology Study* of Feb. 2013, and from the Oakland Museum of California, 2010, *Creek and Watershed Map of Western Alameda County, a Digital Database*.

Hydrology and Restoration. Concepts regarding the hydrology of the Patterson Slough area used in developing an understanding of the area for development of habitat restoration and enhancement recommendations and analyzing project actions that might impact hydrology and associated riparian resources were based on information contained in two Balance Hydrologic's reports for the proposed Patterson ranch Development,

- Balance Hydrologics Inc., Berkeley CA. *Drainage Report and Analysis of Opportunities and Constraints at Ardenwood 2000*, July 2000.
- Balance Hydrologics Inc., Berkeley CA. *Hydromodification Control requirements for the Tract 8035 Patterson Ranch Project*, April 2010.

Climate Change and Sea Level Rise. Potential Climate Change effects on the Project area were developed based in part on information contained in Goals Project 2015: *The Baylands and Climate Change: What We Can Do. Baylands Ecosystem Habitat Goals Science Update 2015* prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. California State Coastal Conservancy, Oakland, CA and information contained in the Bay Conservation and Development Commission report *Adapting to Rising Tides; Alameda County Shoreline Vulnerability Assessment*, by AECOM and Brian Fulfroost & Associates, May 2015.

Impact Assessment

Using the Standards of Significance listed above, the impact analysis evaluates how Proposed Project activities during construction and park operation would affect biological resources. This is determined by using the information from the Existing Conditions section, literature information about the responses of biota to disturbances and pollutants, and preparer expertise and judgment in evaluating existing information regarding species and habitats present and how the components of the Project would interact with the environment.

The assessment of impacts assumes that the Proposed Project would conform to State and federal regulations and would include the acquisition of, and compliance with, appropriate permits and certifications associated with construction (building, grading, demolition), stormwater management, erosion control and disposal of contaminated materials, as required. Specifically, it is assumed that the Project could include the following:

- ◆ A Section 404 of the Clean Water Act; if needed, for work associated with potential placement of trail structures and enhancement of the existing seasonal wetlands, may be covered under a Corps Nationwide Permit 27 – *Aquatic Habitat Restoration, Establishment, and Enhancement Activities*.
- ◆ The Corps may potentially initiate consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service in accordance with Section 7 of the Endangered Species Act

because of activities in wetlands or waters that have the potential to be, or are occupied by listed species, or they occur near enough to the Project Area that they may be impacted.

- ◆ Permits from the San Francisco Bay Regional Water Quality Control Board, including a 401 Water Quality Certification, if needed, and a NPDES stormwater permit may be required for construction of the public access and recreational elements of the Project in wetlands or waters..
- ◆ Preparation and compliance with a Stormwater Management and Erosion Control and Revegetation Plan.
- ◆ Compliance with the regulations of Bay Area Air Quality Management District, Alameda County Public Works and Health Department.
- ◆ Voluntary compliance and coordination with the City of Fremont regarding Municipal Code requirements and ordinances.

Impact Discussion

Project Analysis

The following describes potentially significant impacts to biological resources that could result from implementation for the Project. The analysis is based on the Project actions contained in the proposed LUPA, Park Development Plan, and Project Description that would result in physical changes to the baseline environmental conditions within the Project Area. These actions are described below for each biological significance criterion.

Implementation of the Project has the potential to adversely impact biological resources primarily within the Project area, including impacts to: natural plant communities, wetlands and riparian habitat, and Special Status wildlife and plant species. If an impact is determined to be potentially significant, CEQA requires feasible measures be developed and implemented to minimize the impact. Mitigation of significant impacts must substantially lessen or entirely eliminate the physical impact that the project action will have on the biological resource. CEQA requires that all feasible mitigation be undertaken, even if it does not fully reduce impacts to a *less than significant* level of impact.

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

Impact BIO-1: The Project could have a substantial adverse effect, either directly or through habitat modifications and disturbance, on species identified as a candidate, sensitive, or Special Status species in local or regional plans policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. This represents a *potentially significant* impact.

For CEQA analysis and purposes of discussion of impacts and mitigations for Special Status species, the following section discusses plants and wildlife that were found to have moderate to high potential to occur, or are known to occur within the Project area. These Special Status species are first discussed in general terms on a Project-wide basis, and then grouped into distinctive or similar kinds of species for a more detailed discussion and analysis of impacts and species-specific mitigation measures. These groupings are as follows:

1. Special Status Plant Species
2. Other Special Status Bird Species, Migratory Birds and Raptors
3. Salt Marsh Harvest Mouse
4. California Black Rail

5. Burrowing Owl
6. Western Pond Turtle
7. Bats
8. Monarch Butterfly

Impact BIO-1a, Project-wide: General Discussion of Impacts to Special Status Species.

Implementation of the LUPA and Park Development Plan, including construction of proposed recreational and visitor-serving facilities, the proposed emergency vehicle and maintenance access travel ways, the multi-use and hiking trail network with associated bridges, and proposed cultural resources and water resource management actions, would result in physical changes to baseline environmental conditions within the Project area that support or provide potential habitat to Special Status species.

These actions include: clearing and vegetation disturbance, excavation, fill placement and grading in non-wetland areas, and near or immediately adjacent to jurisdictional wetlands and riparian areas. Additional proposed actions include: placement of base rock and paving of roads, trails, parking areas, and other recreational facilities construction, such as fencing, signs, picnic tables, and utility improvements. Restoration and enhancement actions also include excavation and fill placement, seeding and planting, irrigation, mowing, weeding, and selective herbicide application to control invasive weeds.

These actions could result in temporary and in some cases permanent impacts to Special Status species or the habitat for these species. This represents a *potentially significant* impact.

Temporary construction impacts to Special Status species would be minimized through implementation of the Park District's Best Management Practices (BMPs) as contained in their Construction Technical Specifications. These BMPs include the following:

- Mandatory biological resources awareness training for all construction personnel about Special Status species that could potentially occur within the Project area.
- Protection of all trees in construction work areas, staging areas and along construction access, including no driving or parking within the drip line of a tree unless approved by the District Inspector, along with installation of protective temporary fencing the around drip line of trees.
- Requiring equipment and vehicles to be stored a minimum of 100 feet from the top of all creek banks and requiring vehicle maintenance and fueling of equipment and vehicles a minimum of 200 feet from the top of the creek bank.
- Use of silt fences and fiber rolls to prevent loss of habitat due to erosion or siltation.
- Require that erosion control measures that include installation of fiber rolls and erosion control blankets do not contain netting that could trap small animals and that are weed and seed free.
- Covering trenches with plywood or similar materials, and/ or providing a ramp to allow trapped animals to escape the excavation when not covered.

The following additional mitigation measures would be implemented Project-wide to further reduce impacts to Special Status species.

Mitigation Measure BIO-1a, Project-wide: General Conservation Measures to Protect Habitat for All Special Status Wildlife Species.

The Park District and its Construction Contractors will implement measures to avoid and minimize potential adverse effects on Special Status wildlife species. Prior to conducting work and during work in sensitive biological communities and Special Status species habitats, including work within 100 feet of Patterson Slough, and within or near jurisdictional wetlands, the following measures will be implemented.

- A qualified, U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW) approved Biological Monitor (Qualified Biologist) shall be present to observe work and shall have the authority to halt work as necessary if permit conditions are being violated.
- Pre-construction biological surveys appropriate to Special Status wildlife species will be conducted by the Qualified Biologist prior to initiation of construction.
- Before any construction activities begin on the Project, the Qualified Biologist shall conduct a training session for construction workers, and Park personnel involved in construction of the Project. The training shall include a description of each Special Status species that might occur and their respective habitats, including wetlands, the general measures that are being implemented to protect each of the species as they relate to the Project, and the physical boundaries within which the Project shall be accomplished. The training should also provide instruction in the appropriate protocol to follow in the event that a Special Status species is found onsite, including contact telephone numbers.
- Before starting ground disturbing activities within construction areas, the Park District and its Construction Contractors shall clearly delineate the boundaries of the construction area with fencing, stakes, or flags. Contractors shall be required to restrict construction-related activities to within the fenced, staked, or flagged areas. Contractors shall maintain fencing, stakes, and flags until the completion of construction-related activities in that area. Fencing stakes and flags shall be removed upon completion of construction work. Sensitive habitat areas, including Special Status wildlife species habitat and known populations, and jurisdictional wetlands, shall be clearly indicated on the Project construction plans.
- To prevent Special Status wildlife species from moving through the construction area, the Park District or its Construction Contractors shall install temporary wildlife exclusion fencing. Final fence design, including appropriate animal escape structures within the fencing and fence location, shall comply with permit conditions, as appropriate for each species being protected. Any construction-related disturbance outside of these boundaries, including parking, temporary access, construction staging, or areas used for storage of materials, shall be prohibited without approval of the Qualified Biologist. New trails, bridges, or other structures shall not extend beyond the delineated construction work area boundary. Construction vehicles shall pass and turn around only within the delineated construction work area boundary or existing local road network. Where new access is required outside of existing roads or the construction work area, the route shall be clearly marked (i.e., flagged and/or staked) prior to being used, subject to review and approval of the Qualified Biologist.

- Where wildlife exclusion fencing is not installed and ground disturbing activity is occurring, the Qualified Biologist will approve the proposed disturbance in advance and clear the area prior to the start of ground disturbing activity.
- A USFWS-approved and/or CDFW-approved Biological Monitor should be on-site during installation of the fencing to any Special Status wildlife outside the construction area. The fencing shall be inspected by the qualified Biological Monitor on a daily basis during construction activities to ensure fence integrity. Any needed repairs to the fence shall be performed on the day of their discovery. After construction has been completed, the exclusion fencing shall be removed within 72 hours.
- Immediately prior to conducting vegetation removal or grading activities inside fenced exclusion areas, the Qualified Biologist or a qualified biologist working under their direction shall survey within the exclusion area to ensure that no Special Status species are present. The Qualified Biologist or a qualified biologist working under their direction shall also monitor vegetation removal or grading activities inside fenced exclusion areas for the presence of Special Status species.
- Excavated soils shall be stockpiled in disturbed areas lacking native vegetation, and/or as shown on the Construction Plans, or approved by the Qualified Biologist.
- All detected erosion caused by Project-related impacts (i.e., grading or clearing for new trails) and other improvements shall be remedied immediately upon discovery.
- The introduction of exotic plant species shall be avoided first through prevention, followed by physical or chemical methods. Construction equipment shall arrive at the Project area free of soil, seed, and vegetative debris to reduce the likelihood of introducing new weed species. Weed-free rice straw or other certified weed free straw shall be used for erosion control. Earth-moving equipment, gravel, fill, or other materials will be weed-free. Mechanical seeding equipment shall be inspected for residual seeds and cleaned prior to use onsite. Construction operators will ensure that clothing, footwear, and equipment used during construction is free of soil, seeds, vegetative matter or other debris or seed-bearing material before entering the Park or from an area with known infestations of invasive plants and noxious weeds. Weed populations introduced into the site during construction shall be eliminated by chemical and/or mechanical means approved by the Qualified Biologist.
- Use of herbicides as vegetation control measures shall be used in compliance with the Park District's IPM policies and Best Management Practices (BMPs). All uses of such herbicidal compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and state and federal legislation, as well as additional Project-related restrictions deemed necessary by the CDFW and/or USFWS, and included in the permit conditions. No rodenticides shall be used.
- The introduction of soil-borne pathogens shall be avoided by following the Park District's Pathogen Controls Best Management Practices.

- If Special Status wildlife species are found within or near construction areas during Project construction work, construction activities shall cease in the vicinity of the animal until the animal moves on its own outside of the Project area (if possible). The wildlife resource agency(ies) with jurisdiction over the species shall be contacted regarding any additional avoidance, minimization, or mitigation measures that may be necessary if the animal does not move on its own. The daily monitoring report prepared by the Qualified Biologist shall document the activities of the animal within the site; fence construction, modification, and repair efforts; and movements of the animal once again outside the exclusion fence. This report shall be submitted to the Park District and the appropriate regulatory agency with jurisdiction over the wildlife species.
- Uncommon or previously undocumented Special Status wildlife species observed during surveys will be reported to the USFWS and CDFW so observations can be added to the California Natural Diversity Database (CNDDDB).
- Before steep-walled holes or trenches are back filled, they shall be inspected for trapped animals. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If listed species are trapped, the USFWS and/or CDFW, as appropriate, shall be contacted to determine the appropriate method for relocation.
- Construction pipes, culverts, or other structures that are stored at a construction site for one or more overnight periods and with a diameter of 4 inches or more shall be inspected for Special Status species before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a Special Status species is discovered inside a pipe, and does not move of its own accord, that section of pipe shall not be moved until the appropriate resource agency, with jurisdiction over that species, has been consulted to determine the appropriate method for relocation. If necessary, under the direct supervision of the Qualified Biologist, the pipe may be moved once to remove it from the path of construction activity until the animal has escaped.
- Vehicles and equipment shall be in proper working condition to ensure that there is no potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Contractor equipment shall be checked for leaks daily prior to operation and repaired when leaks are detected. Fuel containers shall be stored within appropriately sized secondary containment barriers. The Qualified Biologist shall be informed of any hazardous spills within 24 hours of the incident. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be properly disposed of at an appropriate facility. If vehicle or equipment maintenance is necessary, it may be performed in the designated staging areas, as shown on the Construction Plans or approved by the Qualified Biologist.
- Temporarily disturbed areas shall be returned to pre-project conditions or better.
- Project-related vehicles should observe a 15-mile-per-hour speed limit on unpaved access roads within the limits of construction.
- Documentation of compliance, as required by any regulatory permit conditions, with applicable state and federal laws pertaining to the protection of Special

Status wildlife and native and migratory birds and raptors shall be recorded in a daily monitoring report and made available to the CDFW as part of a post construction biological monitoring report.

Impact BIO-1b, Project-wide: General Discussion of Special Status Species Habitat.

Temporary and permanent impacts to habitat occupied by Special Status species, sensitive plant communities, and jurisdictional wetlands would also occur as a result of the Project.

Mitigation Measure BIO-1b, Project-wide: Prepare and Implement a Habitat Mitigation and Monitoring Plan (HMMP) for Temporary or Permanent Impacts to the Habitat of Special Status Species and Jurisdictional Wetlands: The Park District shall implement the following mitigation measure to restore or compensate for habitat, including Special Status habitat and jurisdictional wetland areas disturbed or impacted by Project actions.

- To restore any temporarily or permanently impacted habitat for Special Status species or for jurisdictional wetland areas, the Park District shall prepare and implement a Habitat Mitigation and Monitoring Plan (HMMP), as required by regulatory permit conditions. The HMMP shall detail the specifications for minimizing the introduction of invasive weeds, restoring disturbed areas, and shall identify parties responsible for implementing the Plan. The Plan shall include by proportionate amounts, specific habitat suitable for Special Status species and sensitive plant communities that are impacted (e.g., mixed riparian, willow sausal, seasonal wetlands, etc).
- To facilitate preparation of the Plan, the Park District shall, prior to construction, have a botanist or landscape architect (experienced in identifying native plant species in the Project area) perform additional preconstruction surveys of the areas as needed to document baseline vegetation composition, species occurrence, vegetation characterization (tree diameter size, etc.), and percent cover of plant species.

Impact BIO-1c, Project-wide: Special Status Plants. The CDFW has compiled a list of "Special Plants" (CDFW 2018), which include California Special Concern (CSC) species. This compilation includes information developed by the CNPS. These designations are given to those plant species whose vegetation communities are seriously threatened. Although these species may be abundant elsewhere they are considered to be at some risk of extinction in California. Although CSC species are afforded no official legal status under CESA, they receive special consideration during the planning stages of if Park District Land Use Plan development and any adverse impacts are considered to be significant under CEQA.

Special Status plant species have been recorded in the vicinity of the Project area and a number of Special Status plants have been verified as occurring in or near proposed construction areas during Project botanical surveys. These Special Status plants are typically associated with the historic alkali vernal pool habitat area south of Ardenwood Creek / Line P in the Southern Wetlands Natural Unit. This area contains saline-alkali soils, a relatively high brackish groundwater table, and has depressional features that pond water during portions of the rainy season that support Special Status plants. The Special Status plant species verified as occurring south of Line P/Ardenwood Creek include:

1. Congdon's Tarplant (*Centromadia parryi ssp. Congdonii*)
2. Lesser Saltscale (*Atriplex minuscula*)
3. San Joaquin Spearscale (*Etriplex joaquinana*)

In addition to these verified occurrences, several other Special Status plants generally associated with saline alkali soils or saline seasonal wetlands have a potential to occur, but were not observed during previous or current plant surveys.

1. Alkali milk-vetch (*Astragalus tener* var. *tener*)
2. Prostrate Navarretia (*Navarretia prostrate*)
3. Hairless Popcornflower (*Plagiobothrys glaber*)
4. California Seablite (*Suaeda californica*)
5. Saline Clover (*Trifolium hydrophilum*)

Rare plants associated with tidal marsh and saline seasonal wetlands have also been recorded in plant communities to the west of the Project area, in Coyote Hills Regional Park. None have been previously observed in the area immediately adjacent to Patterson Ranch Road and the Tuibun Trail where road improvements, utility installation, and trail widening and elevation would occur. However, there is some potential for rare plants to occur in adjacent saline seasonal wetland habitats.

The remainder of the Park Expansion Project area north of Ardenwood Creek/Line P, in the Western Wetlands and Patterson Slough Natural Units, the Ranch Road Recreation Unit, or the Historic Patterson Ranch Agricultural Unit, consists of non-saline or only very slightly saline alkali soils. Previous plant surveys and surveys conducted in association with the LUPA did not identify any rare plants in this area. The area is ruderal and weedy and rare plants are not likely to occur here.

Construction of the flood control and wetlands mitigation project elements south of Ardenwood Creek/Line P in the Southern Wetlands Natural Unit, which includes vegetative disturbance and clearing, excavation, and soil removal to create new wetlands basins would destroy any rare plants that occur in this area. Any temporary construction disturbance of habitat areas adjacent to Patterson Ranch Road and Tuibun Trail where road and utility improvements are proposed could potentially damage or destroy any rare plants that occur. This represents a *potentially significant* impact.

Mitigation Measure BIO-1c, Project-wide: Avoidance, Minimization, and Compensation for Impacts to Special Status Plant Species:

The Park District and its Construction Contractors will implement measures to avoid and minimize potential adverse effects on Special Status plants. Prior to conducting work and during work in areas with potential for occurrence of Special Status plants, the following measures will be implemented.

- A botanical survey of the action area (construction disturbance area) will be completed by a Qualified Botanist using the US Fish and Wildlife Service's Guidelines for *Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* (USFWS, 2000) and CDFW *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities* (CDFG, 2000). The Qualified Botanist shall be approved by USFWS or CDFW, as required by permit conditions. Surveys shall, be floristic in nature, include areas of potential indirect impacts, be conducted in the field at the time of year when species are both evident and identifiable, and be replicable. The purpose of these surveys will be to identify the locations of Special Status plants. The extent of mitigation needed for the direct loss of or indirect impacts on Special Status plants will be based on these survey results. and consultation with CDFW
- Locations of Special Status plants in proposed construction areas will be recorded by the qualified Botanist using a global positioning system (GPS) unit, and flagged in the field. The GPS data will be used to create digital and

hardcopy maps for distribution to construction inspectors and contractors to inform them of areas where disturbance is prohibited, or where activities are restricted.

- If initial screening by the Qualified Botanist identifies the potential for Special Status plant species to be directly or indirectly affected by a specific construction activity, the Qualified Botanist will establish an adequate buffer area to exclude activities that would directly remove or alter the habitat of an identified Special Status plant population, or result in indirect adverse effects of the species.
- Access may be restricted around Special Status plant populations through appropriate field direction by the Qualified Botanist. This may include signage, buffers, seasonal restrictions, and design or no access, depending on the Special Status species in question.
- The Park District and its Construction Contractors shall install a temporary, plastic mesh-type construction fence (Tensor Polygrid or equivalent) at least 4 feet (1.2 meters) tall around any Qualified Botanist-required buffer areas to prevent encroachment by construction equipment and personnel. The Qualified Botanist will determine the exact location of the fencing. The fencing will be strung tightly on posts set at maximum intervals of 10 feet (3 meters), and will be checked and maintained weekly until all construction is complete in the area where Special Status plant species occur.
- No grading, clearing, storage of equipment or machinery, or other disturbance or construction activity will occur until all temporary construction fencing has been installed by the Park District, and its Construction Contractor, and inspected and approved by the Qualified Botanist.
- Special Status plant species observed during surveys will be reported to the USFWS and CDFW so observations can be added to the California Natural Diversity Database (CNDDB).
- If avoidance of Special Status populations is not feasible, rare plants and/or their seeds shall be collected, salvaged and relocated, and habitat restoration shall be provided to replace any destroyed Special Status plant occurrences at a minimum 1:1 ratio based on the area of lost habitat (accurately field measured). Compensation for loss of Special Status plant populations may include the restoration or enhancement of temporarily impacted areas, and management of restored areas. Restoration or reintroduction may be located on-site (i.e., within the project footprint or local vicinity) or at a nearby suitable off-site area within Coyote Hills Regional Park with suitable soil and hydrologic conditions for that species. At a minimum, the Special Status plant mitigation areas shall meet the following performance standards by the fifth year after mitigation planting/seeding, as determined by monitoring, as follows.
 - The compensation area shall be at least the same size as the impact area.
 - Invasive species cover shall be less than or equal to the invasive species cover in the impact area.
 - Restored populations shall have at least the same number of individuals of the impacted population, in an area greater than or equal to the size of the impacted population, for at least three (3) consecutive years.

- The final Special Status plant impact compensation, plant establishment, and monitoring methods will be determined in consultation with CDFW and will be included in the project Habitat Mitigation and Monitoring Plan (HMMP) see BIO-1b.

Impacts BIO-1d, Species-Specific: Impacts to Special Status Birds, Migratory Birds, and Raptors. Under the terms of the Migratory Bird Treaty Act of 1918 (MBTA), it is unlawful “by any means or manner to pursue, hunt, take, capture (or) kill” any migratory birds except as permitted by regulations issued by the US Fish and Wildlife Service (USFWS). The term “take” is defined by the USFWS to mean to “pursue, hunt, shoot, wound, kill, trap, capture or collect” any migratory bird (or any part), nest, or egg of any migratory bird covered by the MBTA, or to attempt any of those activities.

Take can also be extended to mean activities that disturb or significantly modify or degrade habitat where the effect of the activity results in the impairment of essential migratory bird behavioral patterns such as sheltering, breeding, nesting, or feeding.

The California Fish and Game Code (CFGF) also extends protection to non-migratory birds that are resident game birds (CFGF 3500) and to any birds in the orders falconiformes or strigiformes (hawks, birds-of-prey or raptors) (CFGF 3503). The golden eagle (*Aquila chrysaetos*) is a protected species under the Federal Bald Eagle and Golden Eagle Protection Act (FBGE), and is also Fully Protected under California law (CFP).

Migratory Birds

Coyote Hills Regional Park District biologists consider the willow thickets, mixed riparian forest, and nearby wetlands to be the most important and biologically productive habitats in the Park. They provide an abundant supply of insects, perching and nesting habitat, and are a food base for well over 100 species of wintering migratory and breeding birds.

Migratory birds protected by the MBTA and California law could potentially be impacted by implementation of the LUPA and Park Development Plan. Construction of recreation facilities, including parking areas, restrooms, and picnic areas in the Patterson Ranch Historic Farm and Farm Yard Agricultural Unit, and Ranch Road Recreation Unit, and trail and bridge construction, and restoration and enhancement activities in the Patterson Slough and Western Wetlands Natural Units, and flood control and wetlands creation construction work in the Southern Wetlands Natural Unit could all potentially result in modifications to habitat that could have a short term adverse impact on nesting migratory bird species. Construction equipment that physically disturbs and damages occupied nesting habitat, along with construction noise and disturbance from work in areas near occupied nests, including the use of vibratory equipment such as for soil fill compaction and bridge pier installation that may occur during the migratory bird nesting season (Feb. 1 to Sept. 1) all could cause significantly adverse biological impacts. The loss of an active nest due to construction activities would be a violation of both CFGF 3500 and 3503, and the MBTA, and represents a *potentially significant* impact.

Raptors

Golden eagles are known to occur within the adjacent Coyote Hills Regional Park, although no golden eagle nests have been observed within the LUPA Project area. Several other raptors, including white tailed kite and northern harrier are also known to occur within and forage over the open ruderal grassy fields of the Project area.

Disturbance caused by construction activities that occur near nesting eagles, (which is unlikely to occur within the Project area), or other nesting raptors, such as white tailed kite and northern harrier, could potentially lead to nest abandonment. In addition to temporary construction-related disturbances to nesting habitat areas, recreation facility development, including new trail construction, and vegetation disturbance during restoration and enhancement activities would also

result in temporary or short term impacts to eagle and raptor foraging of ruderal grassland habitat that could potentially affect raptor foraging and prey activity, prey abundance, and prey availability within the Project area; This represents a *potentially significant* impact.

Other Special Status Bird Species

The Project area contains native vegetation that provides suitable habitat for a large number of protected or Special Status birds such as Alameda song sparrow (*Melospiza melodia pusillula*), a CDFW Species of Special Concern (CSC) and salt marsh yellowthroat (*Geothlypis trichas sinuosa*), also a CDFW CSC. Twenty two (22) Special Status birds have a moderate to high potential to occur within the Project area. Special Status bird habitat is principally along the Patterson Slough riparian corridor, the willow thickets along Patterson Ranch Road, and the Oak Grove area on the south end of the Slough. Other Special Status bird species forage in the seasonal wetlands within the Project area. In addition to the tree nesting birds, there are several species of birds such as killdeer (*Chara drius vociferous*), which nests on the ground, and other species that typically nest in areas of dense brushy vegetation, including cattail thickets.

Although non-migratory Special Status birds, and those Special Status birds that are not raptors are not afforded any legal protection under FESA, CESA, MBTA, or FBGE, they are to receive special attention during CEQA biological review of a proposed Project.

The Project could adversely affect Special Status birds if construction occurs while they are present within habitat near work areas through direct physical mortality, or because of construction disturbance and noise that may cause nest abandonment.

The proposed Park Development Plan indicates all proposed new trail and recreational facilities will maintain a 100-foot minimum setback from the edge of the Patterson Slough riparian corridor. Construction activities that occur within or immediately adjacent to potential wooded nesting habitat areas include: 1) the repair of low/wet areas of the existing Willow Trail hiking trail within the upper portion of Patterson Slough, 2) improvement of the existing maintenance access road on the southwest end of Patterson Slough to upgrade as a hiking trail (Overlook Spur), and 3) construction of the Harvest Way Trail connection to Tuibun Trail at Patterson Ranch Road, adjacent to a roadside willow thicket, and 4) disassembly of the Farm Labor Contractors residence, which has large willow branches growing over the roof. Limited tree branch trimming may be needed at all of these locations to facilitate construction work.

Ground nesting birds and existing ruderal grassland foraging habitat utilized by raptors and other Special Status birds could potentially be disturbed by non-wetland area earthwork and grading activities for construction of visitor serving facilities and trails, and by construction equipment importing soil and compost placement for enhancement and restoration, as well as by mowing for vegetation management. Tree planting for willow sausal, mixed riparian and oak savanna restoration and follow up plant establishment and vegetation management activities represents an additional temporary disturbance impact. This represents a *potentially significant* impact.

In the long term, implementation of the Project would have a beneficial effect on eagles, raptors, and Special Status and migratory birds by expanding areas of willow and riparian habitat, oak savanna, and improving plant community diversity and habitat quality in currently ruderal areas. This would result in an increase in food supply for prey animals and an improvement in foraging and nesting habitat for raptors, and other Special Status and migratory birds.

Mitigation Measure BIO-1d, Species-Specific: Conservation Measures to Protect Special Status Birds, Migratory Birds, and Raptors.

- If ground disturbance activities or impacts occur during the breeding season (approximately February 1 through August 31), pre-construction nesting

migratory birds, raptors and other Special Status bird species surveys shall be conducted by a Qualified Biologist. Such surveys shall include but not be limited to the following: salt marsh common yellowthroat, Alameda song sparrow, loggerhead shrike, short-eared owl, white-tailed kite, northern harrier, and other nesting birds protected by the Migratory Bird Act, or by their status as a protected species or Species of Special Concern.

- The pre-construction surveys shall occur within 14 days prior to the ground disturbance and vegetation removal activities. Surveys should be conducted within suitable nesting habitat within 200 feet of the area to be disturbed.
- If the survey does not identify any nesting migratory birds, raptors and other Special Status bird species in the areas potentially affected by the proposed activity, no further action is required. If nesting migratory birds, raptors and other Special Status bird species are found to occur that might be impacted by Project activities, a “no disturbance buffer” will be established around the habitat area. The Qualified Biologist will consult with CDFW to determine the size of the no-disturbance buffer, which will be marked off with temporary orange construction fencing. This buffer may vary depending on habitat characteristics and the species.

Impact BIO-1e, Species-Specific: Salt Marsh Harvest Mouse. Salt marsh harvest mouse (SMHM), a California and Federally listed Endangered Species, is known to occur in the saline seasonal wetlands containing pickleweed vegetation immediately south of the Project area (south of the Southern Wetlands Natural Unit) and separated from it by the Burrowing Owl Levee. SMHM is also known to occur within the adjacent Coyote Hills Regional Park within the saline seasonal wetlands north of Patterson Ranch Road and west of the Kiosk, and may also occur within the tidal marsh areas of lower Alameda Creek. Although suitable habitat is not present in the Park Expansion Project area for this species, it could potentially disperse into Project construction areas for road, trail, and utility work along Patterson Ranch Road, and construction of the 100 foot bridge on the north side of the DUST marsh, for instance to escape to higher ground because of flooding conditions. This species could be harmed by construction activities. This represents a *potentially significant* impact.

Mitigation Measure BIO-1e, Species Specific: Conservation Measures to Protect Habitat for Salt Marsh Harvest Mouse: Additional project-specific avoidance and minimization measures for salt marsh harvest mouse (SMHM) in areas within 200 feet of suitable habitat, such as saline seasonal wetlands near Patterson Ranch Road (pickleweed dominated areas) would be implemented during proposed work along Patterson Ranch Road and the Tuibun Trail. These measures would be consistent with those required by USFWS and CDFW, and as specified in any permit conditions. They are likely to include the following:

- Removal of vegetation where needed in areas near suitable habitat under the supervision of an agency-approved Qualified Biologist using approved methods.
- Upon verifying work zones are mouse free by a Qualified Biologist, Install species-appropriate Environmentally Sensitive Area (ESA) wildlife exclusion fencing prior to initiation of construction in potential mouse habitat areas. Exclusion fencing for Salt Marsh Harvest Mouse shall be designed with agency approved doors to allow escape of trapped mice and have a “no climb” design to ensure mice do not climb over the fence once installed.

- Check in, under and around equipment and material stockpiles for Special Status wildlife on a daily basis each morning, prior to initiation of work.

Impact BIO-1f, Species Specific, California Black Rail: California black rail (CBR), a California listed Threatened Species, was observed in 1993 along the north edge of Coyote Hills Regional Park near the Alameda Creek Flood Control Channel. It may utilize emergent marsh associated with the lower portions of the Flood Control Channel and also lower portions of Line P (Ardenwood Creek) and Like K (Crandall Creek). Suitable habitat is not provided directly within the Park Expansion Project area. However, CBR is presumed to forage and nest in the vicinity of portions of the Project area, but not directly utilize areas that would be physically disturbed by construction activities.

CBR could be impacted by construction activity if noise and disturbance occurs near occupied nesting habitat during breeding season (approximately from February 1 – August 31). These areas include:

1. Elevation of Patterson Ranch Road west of the existing kiosk, installation of utilities within the roadway, and elevation and widening of Tuibun Trail in the vicinity of and west of the kiosk.
2. Construction of the 80-foot bridge on lower Ardenwood Creek and the 100-foot bridge on the north side of the DUST marsh.

This represents a *potentially significant* impact.

Mitigation Measure BIO-1f, Species-Specific: Conservation Measures to Protect Habitat for California Black Rail during Breeding Season:

- Project specific avoidance and minimization measures for California black rail in areas within 200 feet of suitable habitat, such as saline seasonal wetlands, would be implemented during proposed work along Patterson Ranch Road and the Tuibun Trail, consistent with those required by the USFWS and CDFW as specified in any permit conditions.
- Protocol level surveys would be conducted in suitable habitat for California black rail that are within 200 feet of Project “Limits of Work” or as directed in any agency permit conditions. Surveys will be completed prior to initiation of construction each year of proposed construction activity that may potentially impact black rails.
- Protocol surveys would be conducted around dawn and/or dusk between February and March when black rails are most likely to vocalize during their breeding season.
- If active nests are found, the Park District will consult with CDFW to determine appropriate setbacks, buffers, and work windows.

Impact BIO 1g, Species-Specific: Burrowing Owl. Burrowing owls (BO), are a CDFW CSC, and a USFWS Bird of Conservation Concern. They have been previously observed within the Project area during biological surveys completed for the Patterson Ranch Development Project EIR, as well as to the immediate south (south of the Burrowing Owl Levee and the Southern Wetlands Natural Unit). BO have also been reported in the Coyote Hills Regional Park to the west. BO were not

observed during biological investigations for the LUPA, but this species could potentially use portions of the Project area for foraging and nesting in the future.

Vegetative disturbance during clearing and construction grading activities for trails and recreation facilities construction could adversely impact BO if they are present in burrows during construction activities. This represents a *potentially significant* impact.

Mitigation Measure BIO-1g, Species Specific: Conservation Measures to Protect Habitat for Burrowing Owl:

- Burrowing owl surveys will be completed by a CDFW-approved Qualified Biologist for those portions of the Project area that have suitable habitat for this species and that could potentially be disturbed by construction activities. The surveys shall follow burrowing owl survey protocols established by CDFW and may require multiple site visits with the final survey completed no more than 14 days prior to initiation of construction activities
- Should nesting or resident burrowing owls be found to occur within the Project construction area, and their occupied habitat cannot be preserved and protected as noted above, then suitable new burrowing owl habitat shall be created and managed as a part of implementation of the Habitat Mitigation and Monitoring Plan (HMMP) (see Mitigation Measure BIO-1b), following CDFW guidance and protocols.

Impact BIO-1h, Species-Specific: Western Pond Turtle. Western pond turtles (WPT) have not been observed within the Park Expansion Project area during biological investigations completed for the LUPA, or in previous biological surveys. They are a CDFW CSC. Pond turtles have been reported as being present in the adjacent Coyote Hills Regional Park, and have also been documented in the CNDDDB as occurring in the Alameda Creek Flood Control Channel approximately 4.5 miles upstream. The Project area contains marginally suitable habitat for this species within the ponds of Patterson Slough and within adjacent Crandall Creek. Western Pond Turtle was not documented during pre-construction biological surveys within Line-P Ardenwood Creek completed in 2016, prior to initiation of the Phase I Flood Control and Channel Restoration Project.

There is a potential that this species could move or disperse into the Project area, either from the ponds downstream within Coyote Hills Regional Park, or from upstream locations. Should this occur prior to certain construction activities, such as construction of the Crandall Creek Trail connector bridge, or the DUST Marsh Bridge, this species could potentially be injured or killed. This represents a *potentially significant* impact.

Mitigation Measure BIO-1h, Species-Specific: Conservation Measures to Protect Western Pond Turtle:

A qualified Biologist approved by the CDFW shall conduct a preconstruction biological survey for Western Pond Turtle (WPT). The survey area shall include those portions of Crandall Creek (Line-K), Ardenwood Creek (Line-P), DUST Marsh, and Patterson Slough where construction disturbance could occur, or within 500 feet of all such construction activity. The surveys shall be conducted 48 hours prior to initial construction disturbance. Any identified WPT shall be relocated, by a qualified biologist, to a suitable location approved by CDFW and outside of the Project's construction disturbance boundaries.

Impact BIO-1i, Species-Specific: Bats. There are 25 bat species that occur in California, of which 11 are classified as California Species of Special Concern (CSC) by CDFW and the Western Bat Working Group. Two CSC bat species that often roost in old structures or suitable trees are the pallid bat (*Antrozous pallidus*), and western red bat (*Lasiurus borealis*). Removal or substantial disturbance of occupied bat roosts without prior humane eviction or other CDFW-approved mitigation measures could result in “take,” of these species. Take is defined under CESA as “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”

In addition to CSC bat species, non-CSC bat species are also protected under CEQA, usually when there is a potential that large local breeding populations could be adversely impacted by a proposed Project. This “CEQA” protection includes common and widely distributed bat species such as the Brazilian free-tailed bat (*Tadarida brasiliensis*). This species can form large colonies, including in old barns and farm structures.

Bats, including five Special Status bat species, have been recorded in the vicinity of and have a moderate to high potential to occur within the Project area. Bats could potentially roost in large trees along Patterson Slough, as well as in old farm buildings such as the Farm Labor Contractors Residence, and the Arden Dairy Milk House.

Roosting bats could be disturbed, injured, or killed by tree pruning activities involved with trail construction and trail repair or by disturbance of bat occupied buildings during disassembly, moving, or historic renovation. Although no tree removal is proposed within the Project area, some tree trimming may be necessary to make minor improvements to the Willow Trail within upper Patterson Slough, for the improvement and conversion of the existing maintenance access road to become the Overlook hiking spur, as well as for disassembly of the Farm Labor Contractors Residence, all located in the Patterson Slough Natural Unit. Any building modifications for adaptive reuse of the Milk House could also impact bats that might be present in this building.

The general disturbance caused by construction activities, such as equipment noise near bat-occupied habitat, could potentially rouse day-roosting bats, which could cause them to abandon the construction area. Maternity roosts with young not yet able to fly could also be affected. Occupied roost trees for Special Status bats could be disturbed by construction, potentially injuring and perhaps causing mortality of bats during the breeding season. This represents a *potentially significant* impact.

Mitigation Measure BIO-1i, Species-Specific: Conservation Measures to Protect Habitat for Bats (along with Implementation of the City of Fremont’s Standard Development Plan): In advance of tree removal and dismantling of the Contractors residence, a preconstruction survey for Special Status bats shall be conducted by a Qualified Biologist to characterize potential bat habitat and identify active roost sites within the Project site. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, the following measures shall be implemented:

- Removal of trees and structures shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, outside of bat maternity roosting season (approximately April 15 – August 31), and outside of months of winter torpor (approximately October 15 – February 28), to the extent feasible.
- If removal of trees and structures during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the Project site where tree and

structure removal is planned, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by the Qualified Biologist.

- The Qualified Biologist shall be present during tree and structure removal if active bat roosts, which are not being used for maternity or hibernation purposes, are present. Trees and structures with active roosts shall be removed only when no rain is occurring or is forecast to occur for three days and when daytime temperatures are at least 50°F.
- Removal of trees with active or potentially active roost sites shall follow a two-step removal process:
 - On the first day of tree removal and under supervision of the Qualified Biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws.
 - On the following day and under the supervision of the Qualified Biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe).
 - Removal of structures containing or suspected to contain active bat roosts, which are not being used for maternity or hibernation purposes, shall be dismantled under the supervision of the Qualified Biologist in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to roost.

Monarch Butterfly: Although individual Monarch Butterflies (MB) may occasionally travel from the nearby Ardenwood Farm overwintering sites to the Project area, these individuals are not likely to be impacted by Project activities. The Project area itself does not provide suitable habitat to serve as an overwintering site and no overwintering Monarch clusters have been recorded as occurring here. This represents *no impact*.

Significance after Mitigation: With the implementation of Mitigation Measures BIO-1a through BIO-1j, and compliance with Section 18.218.050(c), Standard Development Requirements of the City of Fremont Municipal Code, the impact of the Propose Project on species/habitat identified as a candidate, sensitive, Special Status species would be reduced to a *less than significant* level.

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

Impact BIO-2, Riparian Areas: The Project could have a substantial adverse impact on riparian habitat and other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife Services.

Special Status and Sensitive Natural Communities. CDFW defines Special Status Natural Communities (plant communities) as those areas which are naturally rare and whose extent has been greatly diminished through changes in land use. The CNDDDB tracks 135 such natural communities in much the same way that it tracks occurrences of Special Status species. Information is collected and maintained on each Natural Community site regarding the community's location, extent, habitat quality, level of disturbance, and current protection measures. There is no California law that protects

Special Status natural communities; however, CEQA requires consideration of the potential impacts of a project on biological resources of statewide or regional significance, including what are considered to be Sensitive Natural Communities.

There are no CNDDDB-tracked Special Status natural communities in the Project area. However, any riparian or jurisdictional wetland areas that are not identified as CDFW/CNDDDB Special Status natural communities should also be considered a sensitive natural community. Jurisdictional wetlands within the Project area are discussed in the next section; riparian areas are discussed below.

Riparian Habitat. Riparian habitat occurs in the Project area along Patterson Slough, within the Patterson Slough Natural Unit, and additionally within the riparian habitat that was recently planted (2017) as part of the ACFCWCD Phase I Flood Control channel improvements along Ardenwood Creek/Line P in the Southern Wetlands Natural Unit. Riparian habitat does not occur along the portion of Crandall Creek nearest to the Project area.

There are no Proposed Project actions that would directly impact riparian habitat along Ardenwood Creek / Line P. The proposed 80-foot vehicular and pedestrian bridge crossing Ardenwood Creek occurs immediately downstream of and outside of Phase I Flood Control Project restoration area, and there is no riparian habitat in the vicinity of the proposed bridge.

Three Project actions would temporarily impact riparian habitat along Patterson Slough:

1. Disassembly of the Farm Labor Contractors Residence. There are overhanging willow tree limbs over this building that would need to be trimmed back in order for this work to be completed. Temporary riparian disturbance is estimated to be 1,500 square feet.
2. Improvements to the existing Willow Trail in low and ponded areas where it crosses the upper or west end of Patterson Slough. Temporary disturbance within and adjacent to riparian habitat, including willow tree limb trimming, is estimated to be 2,000 square feet.
3. Improvement of the existing maintenance access road in the southwest end of Patterson Slough for use as the Trail (hiking trail). Temporary disturbance activities associated with improving the existing dirt maintenance road for use as emergency vehicle access, maintenance access, and pathway would occur immediately adjacent to the Patterson Slough mixed riparian forest. Minor trimming of over-hanging willow branches may be needed along approximately 800 linear feet of the existing roadway (4,000 square feet).

None of the riparian disturbance activities involve removal of native trees, or result in the permanent disturbance of riparian habitat. Temporary riparian impacts would total less than 0.1 acres, and all disturbed areas would be restored.

The Project would result in the enhancement or restoration of a minimum of 50 to 65 acres of Mixed Riparian Forest and Willow Sausal with an additional 25 to 35 acres of adjacent oak savanna. Nearly all of this restored area would also be designated as a Special Protection Feature, precluding public access. The existing Willow Trail would remain. Signage, field fencing, screening plantings, and other features would be used to discourage Park visitors and trail users from leaving designated trails and entering riparian habitat areas, including restored areas. New fencing would be designed to avoid interference with wildlife movement.

Impact significance for BIO-2 before mitigation represents a *potentially significant* impact.

Mitigation Measure BIO-2a, Project wide: Minimize Disturbance to Riparian Habitat: For work occurring immediately adjacent to riparian habitat, including

willow thickets and adjacent areas of oak woodland, riparian areas shall be clearly delineated with flagging by a Qualified Biologist. Riparian areas shall be separated and protected from the work area through silt fencing, amphibian friendly fiber rolls (i.e., no monofilament), or other appropriate erosion control material. Material staging, trails and all other Project-related activity shall be located as far possible from riparian areas. If riparian areas cannot be entirely avoided by construction activities, any temporarily impacted areas shall be restored to pre-construction conditions or better at the end of construction (see below Mitigation Measure BIO-2b :).

Mitigation Measure BIO-2b, Project-wide: Habitat Mitigation and Monitoring to Mitigate for Temporary Impacts to Riparian Habitat: If temporary disturbance to riparian habitat within the Project area cannot be avoided, the HMMP discussed in Mitigation Measure BIO-1b, shall be implemented for riparian habitats temporarily impacted by construction activities. The Plan shall outline measures to restore, enhance, improve or re-establish riparian habitats on site.

Significance after Mitigation: With the implementation of Mitigation Measures BIO-2a and BIO-2b, and compliance with Section 18.218.050(c), Standard Development Requirements of the City of Fremont Municipal Code, the impact of the Propose Project on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife Services would be reduced to a *less than significant* level.

- 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, seasonal wetland, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.

Impact BIO-3 Wetlands: This Project could 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, as well as to Waters of the State of California.

A preliminary wetlands delineation was conducted for the southern portion of the Project area (Southern Wetlands Natural Unit) in January 2016, and a preliminary jurisdictional wetlands determination was completed for the entire Project area in the spring of 2017. This preliminary determination is subject to verification by the US Army Corps of Engineers, and California Department of Fish and Wildlife. Project planning used the preliminary wetlands determination to develop the LUPA and Park Development Plan for the preliminary layout of all Project visitor serving facilities to avoid or minimize impacts to wetlands, including those from parking areas, restroom pad, picnic area, foot paths, multi-use trails, and bridge locations.

Seasonal wetlands occur scattered throughout the Project area, primarily in low lying areas on the west side of the Western Wetlands Natural Unit, as isolated shallow depressional ponds, and in low lying areas adjacent to Patterson Ranch, in the Patterson Slough Natural Unit. Wetlands include non-tidal saline seasonal wetlands containing pickleweed, along Patterson Ranch Road, west of the LUPA Project area, freshwater seasonal wetlands, cattail marsh, and ponded areas, such as DUST. The largest wetland areas occur adjacent to and within Patterson Slough, and within the channel banks of Ardenwood Creek (Line P), Crandall Creek, and the lower portions of the Alameda Creek Flood Control Channel. Wetlands and non-wetland Waters of the US include the above creek channel areas, a salt-grass lined drainage ditch in the Southern Wetlands Natural Unit, and a ditch system

draining the east side of the Patterson Slough Natural Unit and turning west along the outboard toe of the Crandall Creek levee.

The Proposed Project is a restoration project and would benefit State and Federally protected wetlands/waters by expanding areas near or adjacent to poor/low quality seasonal wetlands, and creating new or enhanced seasonal wetlands. Inorganic debris and invasive non-native plant species would be removed from the existing seasonal wetlands. The enhanced wetlands would have significantly improved hydrology and would provide higher quality habitat for wildlife. There would be temporary impacts to existing wetlands from removal activities of invasive species and during native plant planting and seeding, but it is estimated that new wetlands would develop significantly enhanced function within 3-5 years. Temporary impacts would be offset by the overall long-term benefits of the site restoration and enhancement.

There are no streams or wetlands identified in the Ranch Road Recreation Unit or the historic Patterson Ranch Farm and Farm Yard Agricultural Unit trail that would be impacted by trail or recreational facilities construction or new agricultural land-uses.

Construction improvements to and along approximately 2,800 LF of Patterson Ranch Road and the Tuibun Trail west of the Park Expansion area would occur immediately adjacent to jurisdictional wetlands. Temporary disturbance of these seasonal wetlands would occur during construction activities, but no permanent fill would be placed in them. Temporary wetland disturbance impacts associated with this work are estimated to be less than 28,000 sq. ft. (0.64 acres).

In addition to the named trails described in the proposed LUPA and Park Development Plan, four proposed bridges would cross over wetlands/waters:

1. 20-foot (existing) Crandall Trail connector bridge in Patterson Slough Natural Unit.
2. 100-foot DUST Marsh bridge connecting existing DUST Trail and Crandall Trail.
3. 80-foot vehicular/pedestrian bridge over Ardenwood Creek/Line P, Southern Wetlands Natural Unit.
4. 550-foot cantilever walkway attached to existing Ardenwood Creek bridge.

Each of these structures are proposed to clear-span wetlands/Waters of the U.S. and the State of California. However, the Crandall Trail connector bridge, the DUST bridge, and the lower Ardenwood Bridge would have bridge abutments and footings constructed immediately adjacent to jurisdictional wetland features. Although no permanent wetlands fill is proposed associated with bridge construction, temporary disturbance of wetlands could occur during construction activities, such as bridge pier and footing excavation, form work, and concrete pours. Temporary wetland disturbance impacts are estimated to be approximately 400 square feet for each bridge structure.

The preliminary Park Development Plans also indicate that improvements along Patterson Ranch Road west of the Park Expansion area, including elevation of low lying areas, utility installation and reconstruction of Tuibun Trail to widen and elevate it would be done in a way that avoids permanent wetland impacts. This would be accomplished by having potential road lane closures to stage construction work on roads, trails and shoulder areas, non-wetland areas and existing fill areas. Permanent wetland fill impacts would be avoided by the use of retaining walls or other structures set at the upland edge of wetlands, and/or by placement of fill on uplands where space allows. Elevated boardwalks on helical piers may be used in some areas to clear span wetlands, minimizing potential wetland fill impacts to less than 0.1 acre of fill.

Temporary wetlands disturbance could occur during willow sausal work and mixed riparian restoration in the Patterson Slough and Western Wetlands Natural Units. This would involve driving 1- to 2-inch diameter live willow and cottonwood stakes or cuttings into the ground 12 to 18 inches at typical spacing of 12 to 15 feet, as well as container plantings of native tree and shrub species. The

total wetland impacted acreage in the willow sausal restoration area is estimated to be well less than 0.05 acres. This is less than the 0.1-acre Corps Section 404 wetlands fill reporting limit. Container plants of native tree and shrub species including, hole excavation and backfill with a native soil/compost mix, watering basin creation, surface composting and browse-protection cage installation would be used for mixed riparian restoration in areas with favorable soil and hydrologic conditions adjacent to and within seasonal wetlands.

In addition to wetlands ground disturbance for the willow sausal restoration and mixed riparian forest planting for construction of trails and visitor serving facilities, shallow excavation and grading is proposed for seasonal wetlands enhancement and creation in the Western Wetlands and Patterson Slough Natural Units. Grading would occur outside of but near preliminarily identified seasonal wetlands. The proposed earthwork also includes selective removal of weed-seed bank topsoil, placement of imported clean fill, and importation and placement of compost, all in non-wetland areas. This work would be completed to improve and convert weedy ruderal areas to enhanced grasslands and would be focused on non-wetland areas that are visible from public roadways, with some areas near existing seasonal wetlands.

Grading for flood control and wetlands mitigation creation is also proposed for the area south of Ardenwood Creek, the Southern Wetlands Natural Unit. This work would be completed by ACFCWCD in coordination with the Park District. Grading in this area includes excavation to depths of 3 to 4 feet below ground surface, and disturbance of up to 50 acres of mostly non-wetlands land.

A former agricultural drainage ditch lined with salt grass that is considered to be wetlands and Waters of the US occurs within the area proposed for flood control and wetlands mitigation area creation. This 0.9-acre area is at the approximate elevation of the design bottom grade of the mitigation wetlands and would be incorporated into the proposed wetland mitigation Project design, along with any additional seasonal wetlands identified by the Corps of Engineers during the verification of the preliminary wetlands determination in this area. Temporary disturbance of these 0.9 acres of wetlands would occur during construction.

This represents a *potentially significant* impact. The following mitigation measures would address impacts to wetlands.

Mitigation Measure BIO-3a, Project-wide: Avoid and Minimize Impacts to Wetlands and Waters of the U.S. and of the State:

- The Project jurisdictional wetland delineation shall be confirmed in coordination with the US Army Corps of Engineers (USACE) and CDFW to determine the extent of Waters of the U.S. and Waters of the State within the Project area to ensure construction footprints and associated construction disturbance areas do not encroach into wetlands.
- The Project shall be designed to avoid and/or minimize direct impacts on wetlands and/or waters under the jurisdiction of the USACE, RWQCB, and CDFW to the extent feasible.

Mitigation Measure BIO-3b, Project-wide: Habitat Mitigation and Monitoring to Mitigate for Temporary Impacts to Wetlands and Waters of the U.S. and of the State: If temporary disturbance or permanent loss of wetlands cannot be avoided, the HMMP (see Mitigation Measure BIO-1b) shall be implemented for wetlands or waters of the U.S. or of the State impacted by construction activities. The HMMP shall outline measures to restore, improve, or re-establish wetland habitat within

Coyote Hills Regional Park to ensure compensatory mitigation requirements for wetland impacts are satisfied.

Significance after Mitigation: With the implementation of Mitigation Measures BIO-3a and BIO-3b, the impact of the Proposed Project on federally protected wetlands as defined by Section 404 of the Clean Water Act and impacts on wetlands and Waters of the State of California through direct disturbance and soil removal, filling, hydro-modification, or other means would be reduced to a *less than significant* level.

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

Wildlife nurseries are unique habitat areas that contain plant species and cover densities for protected breeding and nesting or denning, rearing young until they are capable of being on their own, and that have ready access to nearby sources of food and water.

Wildlife movement corridors and habitat linkages are defined as connections between habitat areas that allow for physical movement and the genetic exchange between isolated populations. These linkages may serve a local purpose, such as providing a connector between foraging and denning areas, or they may be more regional in nature. Some habitat linkages also serve as wildlife migration corridors, where animals periodically move through the corridor, and then return. Other corridors, such as streams or rivers, may serve as important passages for anadromous fish migration from a marine (Bay) environment into freshwater streams in order to reproduce. A group of habitat linkages in an area are said to form a wildlife corridor network.

Several features of the Proposed Project design will allow wildlife unimpeded movement, while preventing human access into wildlife areas. For example, the 4-foot field fences would have a gap at the base to allow small mammals and amphibians to crawl underneath and cross fenced areas. Larger mammals would be able to leap over the proposed fencing.

The mixed riparian forest along Patterson Slough within the Patterson Slough Natural Unit provides a locally important wildlife nursery and also serves as a wildlife movement corridor between the Coyote Hills and wetlands to the west, and suburban areas to the east. Ardenwood Creek/Line P, Alameda Creek and Crandall Creek (located offsite to the immediate north), are also important wildlife movement corridors, with Alameda Creek supporting runs of steelhead salmon. The Patterson Slough riparian corridor contains sycamores, willows, and coast live oak, and provides good nesting habitat to migratory birds, as do the scattered willow thickets along Patterson Ranch Road, west of the Project area.

Implementation of the Proposed Project would not impede the use of a native wildlife nursery site or migratory wildlife corridor. The proposed Park Development Plan, including the layout of parking areas, the restroom and picnic facilities, and the trail network, would avoid potential impacts to wildlife movement corridors and riparian areas. Landscaped areas associated with proposed picnic facilities are more than 100 feet away from the riparian corridor edge, with the paved parking area approximately 125 feet away at its nearest point. The proposed East Slough and Patterson Slough Overlook spur that lead to wildlife observation platforms are respectively more than 420 feet and 100 feet away from the edge of the riparian corridor. The Patterson Slough Overlook Spur footpath follows an existing dirt maintenance access road to a former developed area used previously for farm labor housing. Disassembly of the Farm Labor Contractors Building using small equipment and hand tools would also occur immediately adjacent to the southwest end of Patterson Slough.

Construction of the footpath connection to the existing Crandall Creek Trail, the bridge across Ardenwood Creek, and the cantilever bridge over Alameda Creek at Ardenwood Boulevard all would occur within wildlife movement corridors, but the bridges and trail structures would be clearspan and not block or inhibit movement. The proposed Ardenwood Creek cantilever bridge structures would not impact anadromous fish movement. When the Proposed Project is completed, it would enhance existing habitat and create substantial new habitat for wildlife in the project vicinity. Proposed Project biological impacts associated with wildlife nursery sites and wildlife and fish movement corridors represent a *less than significant* impact.

Habitat fragmentation occurs when connected sensitive plant communities or natural areas, including those areas that serve as nesting and foraging habitat and wildlife movement corridors, become disjointed by habitat removal, by conversion to urban or agricultural uses, or by construction of physical barriers, separating important habitat areas. The natural landscape could potentially be bisected by construction of project elements and features, such as roads and trails, into smaller, more isolated, and less functional natural habitats that make wildlife movement and habitat use more difficult. Habitat fragmentation is not a specific topical area in the Biological Significance Criteria, but is evaluated in this section to provide additional understanding of potential effects the project may have on biological resources.

The proposed Park Expansion area was intensively farmed for more than 150 years and the majority of the 306-acre area is ruderal grassland, farmed or fallow fields. The notable exception is the approximately 12-acre Patterson Slough riparian area located in the Patterson Slough Natural Unit. No new trails or other public access facility are proposed to be constructed within or across Patterson Slough that would bisect or fragment this existing habitat. No new trails will be constructed immediately parallel to this riparian corridor and all new trails are a minimum of 100 feet from its edge. The proposed Overlook Spur foot path that runs along the west side of Patterson Slough on its southwestern end and would use an existing dirt Park maintenance road. This road and existing disturbed area is used for equipment staging for vector control, mowing, and grazing.

In some areas, new multi-use trails and hiking trails are proposed that would pass through current ruderal grasslands, fallow fields and near poor quality seasonal wetlands that would be restored to oak savanna, enhanced grasslands and enhanced seasonal wetlands. These existing and new trails would also be used for emergency vehicle and maintenance access. Multi-use trails and footpaths would also use flood control maintenance roads that would be created as a continuing part of the Phase 1 Flood Control and Wetlands Mitigation project. All visitor-serving facilities and new trails would be constructed prior to or coincident with habitat restoration and enhancement.

The environmental baseline from which biological impacts of the project are evaluated, is based on site conditions as of May 14, 2018 – the date the CEQA Notice of Preparation was issued for the project. As noted in the environmental setting section, the Patterson Slough Natural Unit already experiences disturbances associated with Park District maintenance staff activities, and mosquito and vector control operations. There is also a more than 20-year history of Park visitor use of the Tuibun, Willow, and Crandall Creek Trails, all within the Patterson Slough Natural Unit. Based on the above analysis, there would be *no impact* on wildlife nurseries or wildlife movement corridors associated with implementation of the proposed LUPA and Park Development Plan.

e. Conflict with applicable local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

East Bay Regional Park District is a State of California established Special District with the authority to “acquire land...to plan...develop, and operate a system of public parks, and to do all other things necessary or convenient to carry out the purposes of the District.” As a Special District, it develops and adheres to its own policies and ordinances pertaining to such things as land management and trail construction and operation.

Portions of the Proposed Project south of Ardenwood Creek/Line P (the Southern Wetlands Natural Unit), including flood control facilities and wetlands mitigation construction, would be constructed by and in cooperation with the ACFCWCD, which is also authorized by the State of California to develop and implement policies, procedures and plans for management of water resources, including flood protection, water quality and habitat management, and stormwater management requirements.

The Park District cooperates with local agencies, including cities, counties and other special districts, such as water districts, in complying with their ordinances and regulations, where applicable, such as building, grading and stormwater management.

The Proposed Project would conform to local, state and federal policies and ordinances related to protection of vegetation, water, fish and wildlife resources. Mitigation measures proposed as part of the project or recommended as part of this EIR would ensure sensitive resources are adequately protected or mitigated in compliance with the goals and objectives set forth in the City of Fremont General Plan and related ordinances, as well as the adopted policies and ordinances of the Park District and the ACFCWCD.

City of Fremont Ordinances

There are three City of Fremont (local) ordinances that provide for protection of biological resources: 1) Tree Protection Ordinance) Watercourse (stream) Protection Ordinance, and 3) Standard Development Requirements to Protect Resources. As noted above, compliance with these local ordinances may not be applicable to all parts of the Project area, and all proposed Project actions, but are undertaken cooperatively by the Park District whenever possible. Some of the Project actions are also covered under the Park District's Charter and enabling legislation, but the City ordinances provide useful criteria for evaluating biological impacts under CEQA, and serve as mitigation measures. In addition, portions of the Project area are also covered by an Agricultural and Open Space Easement Agreement that provides guidance for restoration and resource management. Park District policies regarding protection and conservation of biological resources are also applicable.

City of Fremont Tree Protection Ordinance. A Tree Removal Permit is needed for any non-native tree proposed to be removed that is greater than 6 inches in diameter, or any native tree greater than 10", as measured at breast height (DBH).

No trees greater than 6 inches DBH are proposed to be removed by the Project. The limbs of some over-hanging arroyo willow trees in the vicinity of the Farm Labor Contractors Residence would need to be trimmed back during building disassembly. Another large tree occurs in the vicinity of the Historic Milk House Building. However all roads, trails, and parking areas in this vicinity have been laid out to avoid this tree and all other native trees potentially subject to City ordinance.

The City's Tree Ordinance also addresses "landmark trees". There are no recognized landmark trees that are identified in the City's 2012 Landmark Trees publication. Several of the large coast live oak trees that occur north of Patterson Ranch Road and just west of Paseo Padre Parkway may potentially be worthy of consideration as possible landmark trees, but none of these trees would be removed or damaged as part of the Proposed Project.

The Park District's Standard Specifications are that the Project's Construction Plans show the precise location of important trees, with the protection of existing native trees at their drip lines through installation of temporary construction fencing to minimize accidental tree damage. The LUPA and Park Development Plan indicate that all native trees are to be protected and preserved, and would be fenced at their drip lines prior to start of each phase of construction.

City of Fremont Watercourse Ordinance. The Watercourse Protection Ordinance prevents removal of healthy vegetation beyond that needed for maintenance, and prohibits alteration or disturbance of

creek banks. In addition, the Ordinance prohibits “development” within 30 feet of the center line of a creek or 20 feet from the top of the bank, whichever is greater.

The Proposed Project’s Park Development Plan is consistent with this Ordinance. The Project’s proposed recreational facilities and trail are in voluntary compliance with the City of Fremont watercourse regulations. The parking lot is located approximately 125 feet from the vegetated edge of Patterson Slough, picnic tables are approximately 100 feet or more from the vegetated Patterson Slough edge, the east Slough wildlife observation platform is located more than 450 feet away, and the Overlook (west) Slough Spur wildlife platform is also located over 100 feet away from the riparian edge of the Slough.

The north-south trending Oak Trail, located on the east side of Patterson Slough, is also over 100 feet from edge of Patterson Slough at its closest point. Proposed trails traverse portions of a current ruderal weedy area that will be converted to oak savanna, concurrent with or following trail construction.

City of Fremont Standard Development Requirements. Fremont Municipal Code Ordinance 28-2018 (December 2015) provides Standard Development Requirements to Protect Resources, including biological resources and Special Status species. The specific biological resources addressed in this Ordinance are for: 1) burrowing owl, 2) nesting birds, and 3) roosting bats. The Proposed Project Mitigation Measures for biological resources are consistent with or exceed these requirements.

Agricultural and Open Space Easement. Large portions of the Project Area are covered by an Open Space Easement Agreement and an Agricultural Easement Agreement. The Park District and the City of Fremont are parties to this agreement. Habitat restoration, enhancement, protection and public access facilities including trails and wildlife observation platforms, are allowable uses within the Open Space Easement.

East Bay Regional Park District Resource Protection Policies. The Park District also has a number of Policies in its 2013 Master Plan that address protection of biological resources. These include maintenance, management, conservation, enhancement and restoration of natural (biological) resources, including rare, threatened, endangered and locally important species, and their habitat. There are also policies for adaptive management for resources protection associated with climate change. The LUPA and Park Development Plan were developed using these as guidance documents, and are consistent with these Policies.

Based on the above review and analysis, there would be *no impacts* associated with potential conflicts with local ordinances or policies.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or State habitat conservation plan.

The Project site area is not located within the boundaries of a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). However, the Park Expansion Project site is immediately adjacent to the area comprising Segment R in the South Bay Region that is addressed in the *Baylands Ecosystem Habitat Goals Report* of 1999, as updated in 2016. Proposed improvements to Patterson Ranch Road, including utility upgrades and improvements to the Tuibun Trail and the DUST Marsh pedestrian bridge, are within this area. The Goals Report noted that the “*diked baylands east of Coyote Hills support the largest remaining willow grove in the baylands ecosystem, seasonal wetlands and diked wetlands, and a permanent freshwater pond*”. Specifically the Goals Report under the “*Unique Restoration Opportunities*” section states that “on the eastern side of the Coyote Hills, there are seasonal wetlands and willow grove habitat that could be restored or enhanced. The Goals Report recommends that the site *protect and enhance willow groves and seasonal wetlands*.”

The Proposed Project is consistent with this recommendation in that approximately 130 acres of land in the Patterson Slough and Western Wetlands Natural Unit would be restored or enhanced as

willow sausal, mixed riparian forest, oak savanna, or seasonal wetlands and enhanced foraging grasslands. Approximately 80 acres of these habitat types would be created in the area south of Ardenwood Creek (the Southern Wetlands Natural Unit) as part of the ACFCWCD Phase 1 Ardenwood Creek Flood Control and Wetlands Mitigation area project.

The Project would not conflict with any adopted NCCP/HCP, approved conservation plan or local plan. There would be *no impact*.

Cumulative Analysis

The following projects in the vicinity of the Proposed Project site are proposed or approved. No nearby projects were under construction at the time this EIR was prepared.

Proposed Projects

Four office buildings on Campus Court. Four office buildings on Campus Court, east of Paseo Padre Parkway and the Project site, were entitled through the Ardenwood Technology Park Planned District Amendment.²⁸ The four buildings would have a total of 809,236.5 square feet, with corporate/professional, administrative, research and development offices, and a full-service hotel. Ancillary uses could include small-scale retail and services uses including restaurants, delis, dry cleaners, health clubs, banks and small retail establishments.

Replacement of Agricultural Well on Project Site. The Park District is in the process of replacing an existing, nonfunctional agricultural well on the south side of Patterson Ranch Road with a deeper well. Although this will occur on the Project site, it is a separate project to support an existing agricultural operation that has already been initiated, and is not addressed in this CEQA document except in the analysis of cumulative projects.

Approved Projects

Coyote Hills Regional Park Visitor Center. As part of the Coyote Hills Regional Park Land Use Plan, a new and larger Visitor Center was approved in 2005 but has not yet been constructed. This Visitor Center will be located in the existing Regional Park, located adjacent to the Project site to the west. The Visitor Center structure will have a maximum of 8,700 square feet, and will include expanded parking in front of the existing Visitor Center (up to 51 additional spaces for a maximum of 120 paved spaces, including existing gravel spaces), enlarged turnaround, a security residence attached to or behind the Visitor Center, rehabilitation of adjacent Hoot Hollow with new shade trees and facilities for five picnic sites, and removal of exotic trees (acacia) to restore open views of the nearby marsh. Planning and conceptual design for the new Visitor Center are currently underway.

Alameda County Flood Control and Water Conservation District's Flood Control Zone 5 Line P Phase 2 Project. Phase 2 of the Zone 5 Line P Project is located downstream of the southern portion of the Project site. This is a separate project and is not addressed in this CEQA document. Phase 2 involves channel improvements along Line P downstream or west of the Project area, through the existing Coyote Hills Regional Park to its outlet at the tidegate discharge culverts in the Alameda Creek levee north of the Visitor Center. A new vehicular bridge is proposed to replace the existing culverts where Patterson Ranch Road crosses Line P.

The habitat enhancement and wetlands mitigation components of the ACFCWCD Phase 1 project (the work south of Ardenwood Creek/Line P) had not been completed at the time this EIR was prepared. This work involves grading two, 2- to 3-foot-deep off-channel basins that will be

²⁸ Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Chris Barton, Environmental Programs Manager, East Bay Regional Park District, 9 May 2018.

connected to Ardenwood Creek. The two basins will occupy about 30 acres, and will serve as temporary floodwater detention structures during periods of high flow in Ardenwood Creek. Some of the graded earth will be relocated to create oak savanna uplands with a riparian planting zone along Ardenwood Creek, and to create elevated areas for flood control/maintenance roads. Some of the excess cut not used on site may be off-hauled to an approved disposal location. This mitigation area will be operated and managed by the ACFCWCD over an initial 7- to 10-year period, after which the area would be turned over to the Park District for integration into Coyote Hills Regional Park. The site will serve as a mitigation bank for other maintenance projects.

Under Construction Projects

Patterson Ranch Planned District. This project was approved in 2011 for a 428-acre area that includes the Proposed Project site. On a 101-acre portion of the Patterson Ranch Planned District Project site, located northeast of Ardenwood Boulevard and the Proposed Project site, 500 single-family residential lots and associated parks, trails, streets and utilities are under final phases of construction.

Dumbarton Quarry Regional Recreation Area, Planned District Amendment. This project involves development of the former Dumbarton rock quarry, located south of the Project site, into a 91-acre regional park facility including formal picnic areas, children's playground and play areas, trails, park furniture, parking lots, restroom facilities, turf meadows, overnight camping facilities with a small store, laundry and shower facilities, a 13,000 square foot event center and 150 person outdoor amphitheater with outdoor camp fire pit, and a 1/2-acre corporation and maintenance yard. This project is under construction, and is expected to open in late 2019.

Other Planned Projects That Will Not Be Constructed in the Foreseeable Future

As part of the Patterson Ranch Planned District approved in 2011, a 10-acre site on the west side of Ardenwood Boulevard and immediately adjacent to the Proposed Project site was reserved for a city park and a school for up to 1,100 K-6 students. At the time this EIR was prepared, the City of Fremont, Fremont Unified School District, and the Park District were in discussions about the location of the school and a possible land exchange, and it was considered unlikely that the school would be built for another eight to ten years. In addition, the City of Fremont was planning to retain the City park land but had no plans to build a park at this time.²⁹ Therefore, these projects are not listed above as Proposed, Approved, or Under Construction.

Cumulative Impacts of the Proposed Project

As listed above, several projects are known to be in the planning stages or are under construction in the Project vicinity. The potential impacts of the cumulative projects on biological resources tends to be site-/project-specific, and the overall cumulative effect would be dependent on the degree to which significant vegetation and wildlife resources are protected on each project. This includes preservation and protection of native vegetation (grasslands, woodland, and riparian areas), populations of Special Status plant or animal species, and wetland features (including seasonal wetlands, ponds, and stream channels). For the most part, the related projects would increase public access and protect, enhance, or restore wetlands and wildlife habitat or sensitive communities within the vicinity of the LUPA Project area. Further environmental review of specific development proposals in the vicinity of the Project site would serve to ensure that important biological resources are protected and properly managed, and to prevent any significant adverse development-related impacts to biological resources. The City of Fremont's Standard Development Requirements, Tree Protection Ordinance, and Watercourse Protection Ordinance further serve to mitigate the impacts

²⁹ Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Michael Kent, Michael Kent & Associates, 26 July 2018.

of Cumulative Analysis projects on biological resources. For Park District projects within the Cumulative Analysis project listing, the Park District's Ordinance 38 and adopted District BMPs also serve to mitigate biological impacts. Nevertheless, when combined with the effect of past projects, the current projects identified in the Project vicinity, and probable future projects would result in a significant loss of biological resources. This is a significant cumulative impact on biological resources in the City of Fremont and adjacent unincorporated areas.

The Proposed Project's design, and implementation of mitigation measures identified above, would reduce the impacts of the project on sensitive biological resources to a less-than-significant level, and thus would serve to address Project-related contribution to cumulative impacts on biological and wetland resources. Therefore, the Proposed Project would not have a cumulatively considerable impact on biological resources because the incremental effects of the Project would not be considerable when viewed in connection with the effects of past, current and probable future projects. The cumulative impact of the Proposed Project on biological resources would be *less than significant*.

4.2 Cultural and Tribal Cultural Resources

This section provides the environmental and regulatory background necessary to analyze the impacts of the proposed Coyote Hills Restoration and Public Access Project to cultural and tribal cultural resources. This section contains information from the cultural resources technical report prepared by Basin Research Associates for the Proposed Project.³⁰ Preparation of this report included a records search, a review of pertinent literature, consultation with local Native Americans, and a focused field review.

Regulatory Framework

Federal Laws and Regulations

National Historic Preservation Act (NHPA), Section 106

Section 106 of the NHPA (36 CFR 800) requires federal agencies and those they fund or have approval authority over to consider the effects of their actions on properties that may be eligible for listing or are listed in the National Register of Historic Places (NRHP). To determine whether an undertaking could affect NRHP eligible properties, cultural resources (including archaeological, historical, and architectural properties) must be inventoried and evaluated for listing in the NRHP. Although compliance with Section 106 is the responsibility of the lead federal agency, in this case the U.S. Army Corps of Engineers (USACE), others can undertake the work necessary to comply with Section 106. The Section 106 process entails four primary steps, listed below.

1. Initiation of consultation with consulting parties (36 CFR 800.2)
2. Identification and evaluation of historic properties within the Area of Potential Effects (APE) (36 CFR 800.4)
3. Assessment of adverse effects on historic properties within the APE (36 CFR 800.5)
 - ◆ If there are historic properties that will be affected, consult with the CA State Historic Preservation Officer (SHPO) regarding adverse effects on historic properties. This consultation will result in a memorandum of agreement (MOA), if determined appropriate (36 CFR 800.5(d)(2))
 - ◆ If there are no historic properties that will be affected, implementation of the Project in accordance with the findings of no adverse effect shall proceed (36 CFR 36 800.5(d)(1))
4. Resolution of adverse effects and proceeds in accordance with the MOA, if determined appropriate (36 CFR 800.6).

National Register of Historic Places (NRHP)

Criteria for Evaluation

Cultural resources significance is determined using the NRHP's Criteria for Evaluation at 36 CFR 60.4, which state that a historic property is any district, site, building, structure, or object:

- a) that is associated with events that made a significant contribution to the broad patterns of our history (Criterion A);
- b) that is associated with the lives of persons significant to our past (Criterion B);

³⁰ Basin Research Associates, *Historic Property Survey Report/ (Historic Properties Present), Coyote Hills Regional Park Expansion Area, East Bay Regional Park District Coyote Hills Regional Park, Fremont, Alameda County, California*. February 2018.

- c) that embodies the distinctive characteristics of a type, period, or method of construction; or that represents the work of a master, or that possesses high artistic values; or that represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C); and/or
- d) that has yielded, or may be likely to yield, information important in prehistory or history (Criterion D).

In addition to meeting one or more of the criteria identified above, the resource must typically be at least fifty (50) years old.³¹

Archaeologists generally evaluate archaeological resources using Criterion D in order to determine their potential to yield information. Criterion D emphasizes the importance of the information encompassed in an archaeological site rather than its inherent value as a surviving example of a particular architectural type, or its historical association with an important person or event. If the SHPO determines that a cultural resource is eligible for inclusion to the NRHP, then it is automatically eligible for the California Register of Historic Resources (CRHR). If a resource does not have the level of integrity necessitated by the NRHP, it may still be eligible for the CRHR, which allows for a lower level of integrity (see below).

Seven Aspects of Integrity

Cultural resources integrity is determined using the NRHP's seven aspects of integrity at 36 CFR 60.4, which state that a historic property must not only be shown to be significant under the National Register criteria, but it also must retain historic integrity. The seven aspects of integrity include location, design, setting, materials, workmanship, feeling, and association. A property must meet one or more of the Criteria for Evaluation before a determination can be made about its integrity (National Register Bulletin 15).

Clean Water Act

The Proposed Project may potentially require analysis in accordance with Section 404(b)(1) of the Clean Water Act (codified at 33 U.S.C. § 1344) and if a Section 404 (wetlands fill) permit is required for any part of Project implementation, must comply with the regulatory requirements of the Department of the Army, Corps of Engineers (Corps) with regard to cultural resources (historic properties). The Corps (San Francisco District) is the National Environmental Policy Act (NEPA) responsible entity and is required to complete the federal regulatory requirements for cultural resources pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended) (54 U.S.C. § 306108) and its implementing regulations 36 CFR Part 800 associated with any Section 404 permit review and approval. The regulations require a federal agency with jurisdiction over a federal, federally assisted or federally licensed undertaking to take into account the effort of the undertaking on properties listed on or eligible for the National Register of Historic Places (NRHP) and to afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on the undertaking should it adversely affect a NRHP eligible or NRHP listed property. The criteria for determining NRHP eligibility are found in 36 CFR Part 60.

The Park District is the lead local agency and the Corps (San Francisco District) is the lead federal agency for the Project if a Section 404 permit is determined to be necessary. The Corps is responsible for consulting with the California State Historic Preservation Office (SHPO) on their identification and evaluation efforts and on the effects, if any, of the undertaking upon Historic Properties in

³¹ U.S. Department of the Interior, National Park Service, National Register Criteria for Evaluation, Available on the internet at http://www.nps.gov/nr/publications/bulletins/nrb15_2.htm. Accessed 22 May 2012.

accordance with 54 U.S.C. § 302303(b)(5), (b)(6) and (b)(9). The Park District is required to determine the potential impacts of the construction on both historical and archaeological cultural resources and mitigate impacts on any significant resources located that may be affected by the Project to a less than significant effect in accordance with the California Environmental Quality Act (CEQA). The SHPO is the final reviewing party.

The following discussion of local and state laws and regulations relating to cultural resources, and presents additional discussion of California Public Resources Code §5097.98 regarding human remains. The next section summarizes the applicable cultural resources policies and protective measures of the City of Fremont.

State Laws and Regulations

California Environment Quality Act (CEQA)

The CEQA Statute and Guidelines (Title 14 of the California Code of Regulations 15064.5) include procedures for identifying, analyzing, and disclosing potential adverse impacts to historical resources. CEQA defines a “historical resource” as a resource that meets any of the following criteria:

- ◆ A resource listed in, or determined to be eligible for listing in, the NRHP or CRHR.
- ◆ A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code (PRC), unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- ◆ A resource identified as significant (e.g., rated 1-5) in a historical resource survey meeting the requirements of PRC Section 5024.1(g) (Department of Parks and Recreation Form 523), unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- ◆ Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the determination is supported by substantial evidence in light of the whole record. Generally, a resource is considered “historically significant” if it meets the criteria for listing on the CRHR.

CEQA equates a substantial adverse change in the significance of a historical resource with a significant effect on the environment (PRC Section 21084.1) and defines substantial adverse change as demolition, destruction, relocation, or alteration that would impair historical significance (PRC Section 5020.1).

Where a project may adversely affect a unique archaeological resource, PRC Section 21083.2 requires the Lead Agency to treat that effect as a significant environmental effect. A unique archaeological resource is defined as (PRC 21083.2 (g)):

An archaeological artifact, object, or site, about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information,
- (2) has a special and particular quality such as being the oldest of its type or the best available example of its type, or,
- (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

When an archaeological resource is listed in or is eligible to be listed in the CRHR, PRC Section 21084.1 requires that any substantial adverse effect to that resource be considered a significant environmental effect. PRC Sections 21083.2 and 21084.1 operate independently to ensure that potential effects on archaeological resources are considered as part of a project's environmental analysis. Either of these benchmarks may indicate that a project may have a potential adverse effect on archaeological resources.

California Register of Historical Resources (CRHR)

Criteria of Evaluation

The CRHR is a listing of State of California resources that are significant within the context of California's history, and includes all resources listed in or formally determined eligible for the NRHP. The CRHR is a statewide program of similar scope to the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing in the CRHR. A historic resource must be significant at the local, state, or national level under one or more of the following criteria defined in the CCR Title 14, Chapter 11.5, Section 4850:

1. It is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States (Criterion 1); or
2. It is associated with the lives of persons important to local, California, or national history (Criterion 2); or
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values (Criterion 3); or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation (Criterion 4).

In addition to meeting one or more of the criteria identified above, the resource must typically be at least fifty (50) years old so that sufficient time has passed to understand its historical significance.^{32,33} Any resource that meets one of the above criteria, is more than fifty years old, and retains its historic integrity is considered an historical resource under CEQA.

Tribal Cultural Resources

Assembly Bill 52 (AB 52) provides protections for tribal cultural resources.³⁴ All lead agencies as of July 1, 2015 approving projects under CEQA are required, if formally requested by a culturally affiliated California Native American Tribe,³⁵ to consult with such tribe regarding the impacts of a project on tribal cultural resources prior to the release of any negative declaration, mitigated negative declaration or draft environmental impact report. Under PRC Section 21074, tribal cultural resources include site features, places, cultural landscapes, sacred places or objects that are of cultural value to a tribe that are eligible or listed on the CRHR or a local historic register or that the lead agency has determined to be a significant tribal cultural resource.

³² Title 14 California Code of Regulations, Section 4852(d)(2). Available on the internet at: http://www.archive.org/stream/ca.ccr.14.2/ca.ccr.14.2_djvu.txt. Accessed 22 May 2012.

³³ U.S. Department of the Interior, National Park Service, National Register Criteria for Evaluation, Available on the internet at: http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_2.htm. Accessed 22 May 2012.

³⁴ AB 52 amended Section 5097.94 of, and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3 to, the California Public Resources Code.

³⁵ The Native American Heritage Commission maintains a list of more than 100 federally recognized California tribes and an additional list of tribes not recognized by the federal government but listed as non-recognized California tribes. Both groups have the right to request notification and consultation under the AB 52.

Tribal consultation is to continue until mitigation measures are agreed to or either the tribe or the lead agency concludes in good faith that an agreement cannot be reached. In the case of agreement, the lead agency is required to include the mitigation measures in the environmental document along with the related Mitigation Monitoring and Reporting Program (MMRP) (see PRC Section 21084.3). If no agreement is reached, the lead agency must still impose all feasible measures necessary for a project to avoid or minimize significant adverse impacts on tribal cultural resources (PRC Section 21084.3).

California Public Resources Code §5097.98

Section 5097.98 (Notification of Native American human remains, descendants; disposition of human remains and associated grave goods) mandates that the lead agency adhere to the following regulations when a project results in the identification or disturbance of Native American human remains:

1. Whenever the Native American Heritage Commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 24 hours of their notification by the commission. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.
2. Whenever the Native American Heritage Commission is unable to identify a descendent, or the descendent identified fails to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendent, and the mediation provided for in subdivision (k) of Section 5097.94 fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.

Other California Laws and Regulations

Other state-level requirements for cultural resources management appear in PRC Chapter 1.7, Section 5097.5 (Archaeological, Paleontological, and Historical Sites) and Chapter 1.75 beginning at Section 5097.9 (Native American Historical, Cultural, and Sacred Sites) for lands owned by the state or a state agency.

Local Regulations and Policies

East Bay Regional Park District Master Plan

The East Bay Regional Park District Master Plan (Master Plan) defines the long-term vision for lands managed by the Park District. The Master Plan provides a decision-making framework for Park District management, and identifies policies that will achieve district-wide objectives. Park development objectives, land use classifications, and planning and management guidelines are established by the Master Plan. Policies for the preservation and interpretation of cultural resources are woven throughout the Master Plan, including provisions for public participation, interpretation, environmental compliance, open space protection, land acquisition, land use planning, and facility development. Those policies most pertinent to cultural resources in the Project Area are summarized below.

- ◆ Interpretation. The Park District will provide a variety of interpretive programs that focus attention on the region's natural and cultural resources. Programs will encourage an appreciation for the preservation of natural and cultural resources, and will provide for volunteer opportunities.
- ◆ Environmental Compliance. The Park District will develop all planning documents in compliance with CEQA [and, as part of the review process, will consider potential impacts to cultural resources].
- ◆ Facility Development. Park improvements will be designed to avoid or minimize impacts on wildlife habitats, plant populations, and other resources.

East Bay Regional Park District Ordinance 38, Sections 805-808

Portions of Park District Ordinance 38 address the disturbance of objects or features of cultural significance on Park District lands. Each section is briefly summarized below.

- ◆ Section 805. This section states that no person shall damage, injure, collect or remove earth, rocks, sand, gravel, fossils, minerals, features of caves, or any article or artifact of geological interest or value located on Park District parklands. Though oriented toward natural features, this ordinance may be construed as applying to objects or features that, while appearing natural, are actually modified by human action (e.g., cave pictographs misperceived as natural discoloration).
- ◆ Section 806. This ordinance states that no person shall damage, injure, collect or remove any object of paleontological, archaeological or historical interest or value located on Park District parklands. In addition, any person who willfully alters, damages, or defaces any object of archaeological or historical interest or value or enters a fenced and posted archaeological or historical site shall be arrested or issued a citation pursuant to California Penal Code §622.5.
- ◆ Section 807. This ordinance states that special permission may be granted to remove, treat, disturb, or otherwise affect plants or animals or geological, historical, archaeological, or paleontological materials for research, interpretive, educational, or park operational purposes.
- ◆ Section 808. This ordinance states that no person shall cut, carve, paint, mark, paste, or fasten on any tree, fence, wall, building, monument, or other property in the Park District, any bill, advertisement, directional or informational signs, or inscription whatsoever.

EBRPD Guidelines for Protecting Parkland Archaeological Sites

The document entitled *EBRPD Guidelines for Protecting Parkland Archaeological Sites*³⁶ contains guidance for Park District staff on the treatment of archaeological sites in the Project Area. Guidance is provided about archaeological site identification and protection; Native American input regarding proposed treatment of archaeological sites and human remains; and special zoning concessions for Native American and non-Native American archaeological sites.

City of Fremont Municipal Code

Section 18.218.050(c), Standard Development Requirements, of the City of Fremont Municipal Code contains the following requirements for cultural resources:

³⁶ East Bay Regional Park District, 1989. Oakland, California.

(c) Cultural Resources.

(1) Notification, Affiliated California Native American Tribes. Prior to preparation of an environmental assessment and within 14 days of determining that an application for a project is complete, the city shall provide formal notification to the designated contact or a tribal representative of traditionally and culturally affiliated California Native American tribes that have requested to receive such notice from the city. The written notification shall include a brief description of the Proposed Project and its location, project contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to AB 52.

(2) Accidental Discovery of Cultural Resources. The following requirements shall be met to address the potential for accidental discovery of cultural resources during ground disturbing excavation:

(A) The project proponent shall include a note on any plans that require ground disturbing excavation that there is a potential for exposing buried cultural resources.

(B) The project proponent shall retain a professional archaeologist to provide a preconstruction briefing to supervisory personnel of any excavation contractor to alert them to the possibility of exposing buried cultural resources, including significant prehistoric archaeological resources. The briefing shall discuss any cultural resources, including archaeological objects, that could be exposed, the need to stop excavation at the discovery, and the procedures to follow regarding discovery protection and notification of the project proponent and archaeological team.

(C) In the event that any human remains or historical, archaeological or paleontological resources are discovered during ground disturbing excavation, the provisions of CEQA Guidelines Sections 15064.5(e) and (f), and of subsection (c)(2)(D) of this section, requiring cessation of work, notification, and immediate evaluation shall be followed.

(D) If resources are discovered during ground disturbing activities that may be classified as historical, unique archaeological, or tribal cultural resources, ground disturbing activities shall cease immediately, and the planning manager shall be notified. The resources will be evaluated by a qualified archaeologist and, in the planning manager's discretion, a tribal cultural monitor. If the resources are determined to be historical, unique archaeological, or tribal cultural resources, then a plan for avoiding the resources shall be prepared. If avoidance is infeasible, then all significant cultural materials recovered shall be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards. Any plan for avoidance or mitigation shall be subject to the approval of the planning manager.

(E) As used herein, "historical resource" means a historical resource as defined by CEQA Guidelines Section 15064.5(a); "unique archaeological resource" means unique archaeological resource as defined by Cal. Pub. Res. Code § 21083.2(g); and "tribal cultural resource" means tribal cultural resource as defined by Cal. Pub. Res. Code § 21074. Collectively, these terms describe "significant cultural materials."

City of Fremont General Plan

The Community Character Element of the City of Fremont General Plan (adopted 2011) includes the following goal and policies for the protection of cultural resources:

Goal 4-6: Historic Preservation and Cultural Resources

Conservation and enhancement of Fremont's historic sites, buildings, structures, objects, and landscapes into the 21st Century and beyond.³⁷

Policy 4-6.1: Protection of Historic Resources

Identify, preserve, protect and maintain buildings, structures, objects, sites and districts

³⁷ City of Fremont, 2011. *City of Fremont General Plan*. Adopted December 2011.

which are reminders of past eras, events, and persons important in local, state, or national history.

Policy 4-6.10: Protection of Native American Remains

Coordinate with representatives of local Native American organizations to ensure the protection of Native American resources and to follow appropriate mitigation, preservation, and recovery measures in the event such resources could be impacted by development.

City of Fremont Historical Architectural Review Board

For disassembly or demolition of the Labor Contractors Residence, and any exterior improvements/modifications to other potentially historic structures, such as the Milk House Building, Historic Architectural Review by the City of Fremont is required. The Historic Architectural Review will be subject to review and approval of the Historic Architectural Review Board and City Council (for demolition of the potentially historic residence), based on the City of Fremont Historic Resources Ordinance, Municipal Code Section 18.175, which regulates demolition, alteration, and relocation of Register and Potential Register Resources and development proposals affecting resources.

Existing Conditions

The following information is summarized from the cultural resources technical report prepared by Basin Research Associates for the Proposed Project.³⁸ As part of the research for this cultural resources report, Basin Research Associates contacted the California Historical Resources Information System (CHRIS), Northwest Information Center. The Northwest Information Center is one of nine regional Information Centers that maintain a part of the CHRIS Inventory for their respective geographic areas, including information provided by the California Office of Historic Preservation (OHP).

History of the Site

The general study area appears to have been situated in a favorable environment for prehistoric use with water and a variety of ecological niches available for prehistoric subsistence activities and raw material procurement. Native American occupation sites in the Project area appear to have been selected for accessibility, protection from seasonal flooding, and proximity to a diversified resource base. Sea-level changes over the past 6000-8000 years also have influenced site location and distribution especially along the bay margins. It should be noted that the Coyote Hills formation was interpreted as an island by Father Fray Pedro Font during the Second Anza expedition of 1775-1776. Prior to 5,000-4,500 years ago, Native American use of the San Francisco Bay region appears to have been intermittent and sparse. Evidence of early occupation along the bayshore may have been hidden by rising sea levels from about 15,000 to 7,000 years ago or buried under sediments caused by bay marshland infilling along estuary margins from 7,000 years onward.

The Project area is primarily within the ethnographic and historic boundaries of the Native American group known as the *Costanoan* (also as the *Oblone*) and is generally within the area attributed to the *Chochenyo* group but also includes a portion of the area attributed to the *Tamyen* group.

Early groups probably focused on hunting and the gathering of various plant foods along with shellfish collection. Archaeological information suggests a slow steady increase in the prehistoric population over time with an increasing focus on permanent settlements with large populations in

³⁸ Basin Research Associates, *Historic Property Survey Report/(Historic Properties Present), Coyote Hills Regional Park Expansion Area, East Bay Regional Park District Coyote Hills Regional Park, Fremont, Alameda County, California*. February 2018.

later periods. This change from hunter-collectors to an increased sedentary lifestyle is due both to more efficient resource procurement as well as a focus on staple food exploitation, the increased ability to store food at village locations, and the development of increasing complex social and political systems including long-distance trade networks. Prehistoric site types recorded in the general area consist of shell mounds, lithic scatters, quarries, temporary and semi-permanent habitation sites including main villages with associated burial areas, bedrock mortars or other milling feature sites, petroglyph sites, and isolated burial locations.

The period of initial historic exploration of the Project area started in 1769. Even though the routes of the early explorers cannot be determined with total accuracy, a number appear to have been to the east and inland of the vicinity of the Project area. These include the expeditions led by Ortega, who reached Alameda Creek in 1769; Pedro Fages in 1772; Anza and Font in 1776; and the later Spanish expedition of Hermenegildo Sal accompanied by Fray Antonio Danti who ascended to the top of the Coyote Hills in 1795.

As one of seven missions in Ohlone territory, Mission San Jose had a great impact on the aboriginal population living in the study area. Mission San Jose was the leading producer of food and cattle for many of the other missions. During the Hispanic Period, settlement was concentrated around Vallejo Mills (in present-day Niles) as well as at Mission San Jose (located on Mission Boulevard in present-day Fremont). Under the Spanish, all land was controlled by either the missions or the pueblos. After Mexico seceded from Spain in 1822, land grants to private citizens increased significantly.

After the secularization of the missions and the American takeover of California during the 1840s, the assets of Mission San Jose, including land and livestock, dwindled. The Proposed Project is situated within the southern part of the Rancho Potrero de los Cerritos, a temporary grant by Governor Alvarado on November 29, 1842 and final grant in fee by Governor Micheltorena on March 21, 1844 to Tomas Pacheco and his brother-in-law, Agustin Alviso. The rancho was patented to them on February 21, 1866 for 10,610.26 acres. None of the known adobe and other buildings and features dating from 1776 to about 1850 associated with the Rancho Potrero de los Cerritos were located in the vicinity of the Proposed Project.

In 1848, California became a United States territory with the signing of the Treaty of Guadalupe Hidalgo that ended the war between the United States and Mexico. California became a state in 1850, and in 1853, Alameda County was created and soon thereafter it was subdivided into six townships, including Washington (which consisted of the present-day cities of Fremont, Newark and Union City) in the southern half of the county.

By the early 1870s, the roads joining the towns of Washington Township created the primary system of traffic arteries still found today in Fremont/Union City area. Throughout most of its history, Washington Township has been primarily a collection of small agricultural communities. The area's agricultural economy was significant in northern California for over 160 years - from the founding of Mission San Jose in 1797 until the 1960s.

The Gold Rush of 1848 brought a massive influx of immigrants from all parts of the world. As many of these new immigrants became discouraged with gold mining, they sought a more stable livelihood as farmers and ranchers. The new increase in population also created a domestic market for agricultural products that had never existed before. Once the owners of the Mexican ranchos obtained clear title to their land, they typically sold off parcels to the newcomers who started small family farms. A typical homestead in early California was from 160 to 640 acres, where a farmer raised hay, grain and livestock.

After the railroad arrived in Washington Township in 1869, the agricultural economy changed from grain to fruit cultivation over the next 10 years. In almost every area in the county served by adequate rail transportation the big grain ranches were subdivided into small holdings. The railroad provided a way to move fruit to market while still fresh, and improvements in refrigerated rail cars made it possible to ship fresh produce longer distances. The development of the canning industry also created new methods of preserving and storing for later consumption.

During the 20th century, Washington Township developed into a diverse agricultural community. Washington Township remained primarily a rural, agricultural community until the late 1950s. The long agricultural tradition in southern Alameda County, however, came to an end only with the onset of urbanization in the late 1950s. With the construction of the Nimitz Freeway (at that time originally Highway 17 and now Interstate Route 880) in 1957, residential subdivisions started to replace the farms and ranches in Washington Township. Before the construction of the Nimitz, the main traffic arteries joining the area to Oakland and San Jose were two lane highways: the Hayward-Niles Road (now Mission Boulevard) and State Route 17 (now Fremont/Alvarado Boulevard).

Washington Township remained a collection of eight unincorporated, rural towns until after World War II. In 1956, the towns of Niles, Centerville, Irvington and Mission San Jose and Warm Springs incorporated as the City of Fremont in response to a community desire for local planning to control new suburban development. Washington Township's 1950 population of about 20,000 increased to over 100,000 by 1970. The small family farm, the basis of Washington Township's agricultural economy for over 100 years, became obsolete as agribusiness based in the Central Valley increasingly dominated California agriculture. Major new commercial developments accompanied the development of the new residential subdivisions during the 1960s. Fremont was one of the fastest growing cities in California in the 1970s and 1980s. The 1980s boom in new high technology industrial plant construction was accompanied by much new residential construction. This pattern continues with the area considered a northernmost extension of Silicon Valley with numerous tech firms located in the expanding business parks and industrial areas. Today, Fremont and Union City are completely urbanized with a combined population of over 290,000.

Paleontological Resources

Franciscan Formation deposits, which have the potential for containing invertebrate and vertebrate fossils, underlie the Project site and Coyote Hills Regional Park.

Native American Cultural and Tribal Cultural Resources

As part of the research for the cultural resources technical report mentioned above, Basin Research Associates contacted the Native American Heritage Commission (NAHC) for a search of the Sacred Lands File for the Project site. The NAHC recommended contacting six individuals/groups to determine if any tribal cultural resources are located within the area(s). One Native American, Mr. Andrew Galvan (The Ohlone Indian Tribe) was noted as having information on Sacred Land File site(s). A focused field inspection in association with Mr. Galvan was completed August 22, 2017 to locate and discuss unrecorded prehistoric resources known to Mr. Galvan based on his previous observations in the area.

A portion of prehistoric archaeological site CA-ALA-13 (P-01-000034) is within the Project site. This site has been determined eligible for the National Register of Historic Places (NHRP) by a consensus through Section 106 process. It is listed in the California Register of Historical Resources (CRHR), and the Fremont Register of Historic Resources. As a result of dike construction, agricultural activities, and dredging in the twentieth century, much of the archaeological resource has been destroyed. Most of the recorded ALA-13 site is outside the Project site. Archaeological testing of

ALA-13 to a depth of 5.2-6.5 feet deep within the Project site did not expose any prehistoric or historic cultural materials indicating that the prehistoric resource did not extend into the Project area.

Two unrecorded prehistoric midden exposures were identified by Andrew Galvan, The Ohlone Indian Tribe, during a site visit. One midden exposure is present within the Project site. Another unrecorded midden exposure is adjacent to the Project site boundary.

A small "shell midden" deposit is present at two locations along the west side of Paseo Padre Parkway within the Project site. Archaeological presence/absence testing program exposed disturbed fill interpreted as redeposited shell midden lacking integrity. One small unidentifiable fragment of human bone was recovered during testing in 2007 and was transferred to Andrew Galvan, The Ohlone Indian Tribe, acting as the Most Likely Descendant, as designated by the Native American Heritage Commission. This suggests that the disturbed midden could potentially yield isolated prehistoric objects and human bone important to The Ohlone Indian Tribe.

Two prehistoric archaeological sites have been recorded within 0.25 miles of the Project site: CA-ALA-329 (P-000105), also known as Nelson Mound #329 (listed on the Fremont Register of Historic Resources), and CA-ALA-465 (P-01-000236) (Ryan Mound or Newark #2), a shell scatter with midden and minor other cultural material.

Built Environmental Cultural Resources

Two historic era archaeological sites have been recorded within 0.25 miles of the Project site: CA-ALA-448H (P-01-000170), the former "W. Imlay" EuroAmerican farm house and CA-ALA449H (P-01-000171), the former "A. Ross " EuroAmerican farm house, both dating to ca. 1850-1860s.

Ardenwood Historic Farm, which is located approximately 0.5 miles east of the Project site, is a working farm maintained by the East Bay Regional Park District. It contains the historic Patterson House and the Victorian Garden, which looks much like it did near the turn of the twentieth century.

Two architectural properties/complexes have been recorded within the Project site: the Arden Dairy Milk House at 6525 Paseo Padre Parkway within the Farm Yard Agricultural Unit (Oak Tree Produce Complex) (P-01-010837), and the Patterson Ranch Labor Contractors Residence located about a quarter-mile to the north of the milk house at 6330 Patterson Ranch Road (P-01-010838). Both appear eligible for the CRHR.

Arden Dairy Milk House

The Arden Dairy Milk House, 6525 Paseo Padre Parkway (P-01-010837), is one of seven buildings within the Farm Yard Agricultural Unit (Oak Tree Produce Complex). It is a circa 1940 structure which once served as a milk house (i.e., a dairy farm building that provided cold storage for raw milk prior to its delivery to a creamery for pasteurization and bottling). Alterations to the Milk House building have been relatively minor. It is the sole remnant of the circa 1923 Arden Dairy, a farmstead that included four large barns, mostly demolished circa 1990 when Paseo Padre Parkway was extended through the complex.

The Arden Dairy Milk House appears to have been established in the context of this World War I-era land reclamation activity near the Coyote Hills and appears to be eligible for listing on the California Register of Historic Resources (CRHR) under Criterion 1, for its "significant contribution to the broad patterns of California's history and cultural heritage."³⁹ The structure bears an important

³⁹ Woodruff Minor, Stuart Guedon, Melody Tannam, Basin Research Associates, 6525 Paseo Padre Parkway, California Department of Parks and Recreation Primary Record #P-01-010837, August 2007.

relationship to the agricultural history of Fremont as a rare surviving example of an agricultural building associated with the dairy industry. The period of significance extends from ca. 1923 to 1961, the estimated date of construction until the closing of the Arden Dairy and the adaptation of the farmstead to other agricultural uses.

As a work of architecture, the building appears to be eligible under Criterion 3, because it embodies "the distinctive characteristics of a type, period, region, or method of construction." The building is a largely intact and distinctive example of an early 20th century milk house, once associated with an important local dairy, exhibiting in its form the transition from hand- to machine-milking.

Patterson Ranch Labor Contractors Residence

The Patterson Ranch Labor Contractors Residence, located at 6330 Patterson Ranch Road (P-01-010838), is a one-story, wood-frame residence 28 feet wide by about 46 feet long, painted red with white trim. It was built circa 1937 to provide housing for the ranch's labor contractor – the person who procured the services of seasonal workers for various tenant farmers. Later the house served as a residence for the ranch's livestock manager.

The house is now abandoned and is in fair to poor condition, although it appears to retain a high degree of architectural integrity.⁴⁰ It appears to be eligible for listing on the CRHR under Criterion 1, history. The structure bears an important relationship to the agricultural history of Fremont as a rare surviving example of an agricultural building associated with farm workers on the area's largest ranch. As a mid-20th century example, it embodies the persistence of the type within the region's farming economy. The period of significance extends from 1937 to 1956, from the date of construction until the incorporation of Fremont.

Standards of Significance

For purposes of this EIR, the Project would have a significant impact on cultural and tribal cultural resources if it would:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in the California Code of Regulations Section 15064.5;
- b. Cause a substantial adverse change in the significance of an archaeological resource as defined in the California Code of Regulations Section 15064.5;
- c. Directly or indirectly destroy a unique paleontological resource or unique geologic feature;
- d. Disturb any human remains, including those interred outside of formal cemeteries; or
- e. 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:
 - 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
 - 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

⁴⁰ Architectural Resources Group, Conditions Assessment and Recommendations, Patterson Ranch Labor Contractors Residence, June 30, 2017.

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.

Impacts Discussion

Project Analysis

The following discussion incorporates information from the cultural resources report prepared by Basin Research Associates.⁴¹

- a. Cause a substantial adverse change in the significance of a historical resource as defined in the California Code of Regulations Section 15064.5

Historic Era Archaeological Sites

The two recorded historic era archaeological sites near the Project site, CA-ALA-448H (P-01-000170), the former "W. Imlay" EuroAmerican farm house and CA-ALA449H (P-01-000171), the former "A. Ross " EuroAmerican farm house, are both located outside the Project site and would not be affected by the Proposed Project.

Arden Dairy Milk House

As discussed above, the Milk House is a rare surviving example of an agricultural building associated with the dairy industry, a largely intact and distinctive example of an early 20th century milk house. It is considered an historic architectural resource for purposes of this EIR

Under the Proposed Project, the Milk House building would be protected from deterioration and weather damage, and may be rehabilitated for use as a fresh produce stand or other compatible park serving use.

Impact CUL-1: Project construction could disturb the Arden Dairy Milk House on the site, a historic building. This represents a *potentially significant* impact.

Mitigation Measure CUL-1a: The Park District shall retain the Arden Dairy Milk House in its current location to maintain integrity of location. Annual inspections by Park District maintenance staff shall be conducted each year to assess the building's interior and exterior condition, including weather tightness and vandal resistance. Following inspection, repairs and maintenance shall be conducted as necessary in a timely fashion. Repairs and maintenance activities and prioritization shall be guided by the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995).

Mitigation Measure CUL-1b: If the Arden Dairy Milk House is restored and/or adaptively reused, restoration and adaptive reuse shall be conducted to the extent feasible, in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and*

⁴¹ Basin Research Associates, *Historic Property Survey Report/ (Historic Properties Present), Coyote Hills Regional Park Expansion Area, East Bay Regional Park District Coyote Hills Regional Park, Fremont, Alameda County, California*. February 2018.

Guidelines for Rehabilitating Historic Buildings (1995). A historic architect meeting the Secretary of the Interior's Professional Qualifications Standards shall prepare the treatment plans. New construction within 30 feet of the building shall be consistent with its historic character, to the extent feasible. Exterior modifications to the Arden Dairy Milk House shall be subject to Historic Architectural Review by the City of Fremont.

Significance after Mitigation: With the implementation of Mitigation Measures CUL – 1a and CUL – 1b, and compliance with Section 18.218.050(c), Standard Development Requirements, of the City of Fremont Municipal Code, the impact of the Proposed Project on the Arden Dairy Milk House would be reduced to a *less than significant* level.

Patterson Ranch Labor Contractors Residence

As discussed above, the Contractors Residence is a rare surviving example of an agricultural building associated with farm workers on the area's largest ranch. As a mid-20th century example, it embodies the persistence of the type within the region's farming economy.

Under the Proposed Project, the Contractors Residence building would be disassembled and its materials salvaged for reuse as an interpretive exhibit, farm stand or other display that reflects the structure's historic context.

Impact CUL-2: Dismantling and removal of the Patterson Ranch Labor Contractors Residence would cause a substantial adverse change to this historic building on the Project site. This represents a *potentially significant* impact.

Mitigation Measure CUL-2a: The Park District shall document the Contractors Residence prior to disassembly or demolition activities. This documentation shall be performed by a Secretary of Interior-qualified professional (in history or architectural history) using professional standards such as the National Parks Service (NPS) Historic American Building Survey (HABS)/Historic American Landscape Survey (HALS) Level I report, or as required by the City of Fremont Historic Architectural Review Board.

Mitigation Measure CUL-2b: In concert with Mitigation Measure CUL-2a, the Park District shall install an interpretive display or signage for public exhibition concerning the history of the historical resource at the site or provided to local historical societies and libraries.

Significance after Mitigation: With the implementation of Mitigation Measures CUL – 2a and CUL – 2b, and compliance with Section 18.218.050(c), Standard Development Requirements, of the City of Fremont Municipal Code, the impact of the Proposed Project on the Patterson Ranch Labor Contractors Residence would be reduced, but would remain a *significant unavoidable* impact.

- b. Cause a substantial adverse change in the significance of an archaeological resource as defined in the California Code of Regulations Section 15064.5

Unrecorded Prehistoric Midden Exposures

As discussed above, an unrecorded midden exposure is present along the south bank of Patterson Slough near Patterson Ranch Road within the Project site, and another unrecorded midden exposure

is near the entry kiosk at the Chochenyo Trail adjacent to the Project site boundary. These middens may contain human remains.

“Shell Midden” Within the Farm Yard Agricultural Unit

As discussed above, a small “shell midden” deposit is present at two locations within the Farm Yard Agricultural Unit (Oak Tree Produce Complex) along the west side Paseo Padre Parkway within the Project site. One small unidentifiable fragment of human bone was recovered in 2007, suggesting that the disturbed midden could potentially yield isolated prehistoric objects and human bone important to The Ohlone Indian Tribe.

Impact CUL-3: Excavation and earth moving activities for the Proposed Project could have an adverse impact on the two unrecorded midden exposures, and the “shell midden” deposit present at two locations within the Project site. These middens may contain human remains, as well as currently undiscovered Native American cultural objects and human remains.

As discussed in Chapter 3, Project Description, Cultural Resources Management Actions, above, construction work involving excavation that could potentially impact cultural resources would be conducted under the observation of a qualified Cultural Resources Monitor and, where needed, a representative of the Ohlone people.

Mitigation Measure CUL-3a: In order to mitigate potential adverse impacts to Native American cultural objects discovered during construction, work shall be halted within 100 feet of the discovery until the objects have been inspected and evaluated by a qualified Archaeologist meeting the Standards of the Secretary of the Interior. The Archaeologist shall, in accordance with *EBRPD Guidelines for Protecting Parkland Archaeological Sites*⁴², identify and evaluate the significance of the discovery and develop recommendations for treatment to ensure any impacts to the cultural resource are less than significant. The preferred mitigation is avoidance. If avoidance is not feasible, Project impacts shall be mitigated in accordance with the recommendations of the evaluating Archaeologist in consultation with the East Bay Regional Park District, as Lead Agency, and CEQA Guidelines §15126.4 (b)(3)(C). Such mitigation may include additional archaeological testing, archaeological monitoring and/or an archaeological data recovery program. A Native American monitor shall be retained to monitor the ground disturbance when it is suspected that prehistoric human remains might be encountered.

Mitigation Measure CUL-3b: If Native American human remains are discovered during construction, implement Mitigation Measure CUL-5.

Significance after Mitigation: With the implementation of Mitigation Measures CUL-3a and CUL-3b, compliance with Section 18.218.050(c), Standard Development Requirements, of the City of Fremont Municipal Code, and observation of construction work involving excavation that could potentially impact cultural resources by a qualified Cultural Resources Monitor and, where needed, a representative of the Ohlone people, as called for in the Project description, the impact of the Proposed Project on Native American cultural objects would be reduced to a *less than significant* level.

⁴² East Bay Regional Park District, 1989. Oakland, California.

c. Directly or indirectly destroy a unique paleontological resource or unique geologic feature

There are no unique geologic features at the Project site, although the Coyote Hills, located within the adjacent Coyote Hills Regional Park, are considered a unique geological resource. The Proposed Project would not affect the geologic feature of the Coyote Hills.

The Project site is relatively flat and underlain by surficial deposits of soil. Soil is unlikely to contain paleontological resources. However, the rocks of the nearby Coyote Hills are part of the “Franciscan” terrain of the Jurassic age, one of the oldest formations in the East Bay. The Franciscan Formation has the potential for containing invertebrate and vertebrate fossils, although it is not particularly fossil rich. The Proposed Project would involve excavation to a depth of up to seven feet for utility installation, which could potentially impact fossil containing rock units. This represents a *potentially significant* impact.

Impact CUL-4: Excavation, earth moving, and trenching for utilities during construction of the Proposed Project could impact fossil containing rock units.

Mitigation Measure CUL-4: . The Park District shall be notified if fossils and possible unique geological features are uncovered during construction of the Proposed Project. Work shall halt within 50 feet of the find until the situation can be assessed by a qualified Geologist or Paleontologist. The Geologist or Paleontologist shall identify and evaluate the significance of the discovery and develop recommendations for treatment to ensure any impacts to the cultural resource are less than significant. Mitigation may include avoidance of the resource; preparation of a treatment plan that could require recordation, collection, and analysis of the discovery; or curation of the collection and supporting documentation in an appropriate depository. All feasible recommendations of the Geologist or Paleontologist shall be implemented.

Significance After Mitigation: With the implementation of Mitigation Measure CUL-4, the impact to fossils and unique geological features would be *less than significant*.

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

Due to the intensity of the settlement of Native American people in the Project vicinity, and the known middens at the Project site, there is the potential of encountering Native American human remains during earth disturbing activities of Project construction.

Impact CUL-5: Excavation, earth moving, and trenching for utilities during construction of the Proposed Project could have an adverse impact on currently undiscovered human remains.

Mitigation Measure CUL-5: In order to mitigate potential adverse impacts to human remains discovered during construction, work shall be halted within 100 feet of the discovery until the materials or features have been inspected and evaluated by a qualified Archaeologist who meets the Standards of the Secretary of the Interior. The Park District and/or its contractors shall immediately contact the Contra Costa county coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines § 15064.5(e)(1). If the county coroner determines that the remains are Native American, the Park District and/or its contractors shall contact the NAHC, in accordance with HSC § 7050.5(c), and PRC § 5097.98. Per

PRC § 5097.98, the Park District shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the Park District and/or its contractor has discussed and conferred, as prescribed in this section (PRC § 5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.

Significance after Mitigation: With the implementation of Mitigation Measure CUL-5, which has been recommended by the Most Likely Descendant designated by the Native American Heritage Commission, and compliance with Section 18.218.050(c), Standard Development Requirements, of the City of Fremont Municipal Code, the impact of the Proposed Project on human remains would be reduced to a *less than significant* level.

- e. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Sections, 21074, 5020.1(k), or 5024.1.

As previously described above, in Regulatory Framework, under subheading “Tribal Resources,” a Tribal Cultural Resource (TCR) is defined as a site, feature, place, cultural landscape (which must be geographically defined in terms of size and scope), sacred place, or object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register, or included in a local register of historical resources, or if the East Bay Regional Park District, acting as the lead agency, supported by substantial evidence, chooses at its discretion to treat the resources as a TCR.

As discussed under impact discussions CUL-3 and CUL-5, impacts from development of the Proposed Project on the site could impact known and unknown archaeological resources including Native American artifacts and human remains. Impacts would be reduced to a less-than-significant level with implementation of Mitigation Measures CUL-3a and CUL-5 (CUL-3b).

Compliance with existing federal, State, and local laws and regulations, and East Bay Regional Park District and City of Fremont General Plan cultural resource preservation policies (listed above), would protect both known and unrecorded TCRs on the Project site by providing for the early detection of potential conflicts between development and resource protection, and by preventing or minimizing the material impairment of the ability of archaeological deposits to convey their significance through excavation or preservation. Implementation of Mitigation Measures CUL-3a and CUL-5 would reduce any impacts to TCR discovered on the Project site as a result implementation of the Proposed Project.

Impact CUL-6: Excavation, earth moving, and trenching for utilities during construction of the Proposed Project could have an adverse impact on known and currently undiscovered tribal cultural resources on the Project site.

Mitigation Measure CUL-6a: Implement Mitigation Measure CUL-3a.

Mitigation Measure CUL-6b: Implement Mitigation Measure CUL-5.

Significance after Mitigation: With the implementation of Mitigation Measures CUL-3a and CUL-5, and compliance with Section 18.218.050(c), Standard Development

Requirements, of the City of Fremont Municipal Code, the impact of the Proposed Project on tribal cultural resources would be reduced to a *less than significant* level.

Cumulative Analysis

The following projects in the vicinity of the Proposed Project site are proposed or approved. No nearby projects were under construction at the time this EIR was prepared.

Proposed Projects

Four office buildings on Campus Court. These buildings were entitled through the Ardenwood Technology Park Planned District Amendment.⁴³ They would have a total of 809,236.5 square feet, with corporate/professional, administrative, research and development offices, and a full-service hotel. Ancillary uses could include small-scale retail and services uses including restaurants, delis, dry cleaners, health clubs, banks and small retail establishments.

Replacement of Agricultural Well on Project Site. The Park District is in the process of replacing an existing, nonfunctional agricultural well on the south side of Patterson Ranch Road with a deeper well. Although this will occur on the Project site, it is a separate project to support an existing agricultural operation that has already been initiated, and is not addressed in this CEQA document except in the analysis of cumulative projects.

Approved Projects

Coyote Hills Regional Park Visitor Center. As part of the Coyote Hills Regional Park Land Use Plan, a new and larger Visitor Center was approved in 2005 but has not yet been constructed. This Visitor Center will be located in the existing Regional Park, located adjacent to the Project site to the west. The Visitor Center structure would have a maximum of 8,700 square feet, and the Project will include expanded parking in front of the existing Visitor Center (up to 51 additional spaces for a maximum of 120 paved spaces, including existing gravel spaces), enlarged turnaround, a security residence attached to or behind the Visitor Center, rehabilitation of adjacent Hoot Hollow with new shade trees and facilities for five picnic sites, and removal of exotic trees (acacia) to restore open views of the nearby marsh.

Alameda County Flood Control and Water Conservation District's Flood Control Zone 5 Line P Phase 2 Project. Phase 2 of the Zone 5 Line P Project is located downstream of the southern portion of the Project site. This is a separate project and is not addressed in this CEQA document. Phase 2 involves channel improvements along Line P downstream or west of the Project area, through the existing Coyote Hills Regional Park to its outlet at the tidegate discharge culverts in the Alameda Creek levee north of the Visitor Center. A new vehicular bridge is proposed to replace the existing culverts where Patterson Ranch Road crosses Line P.

The habitat enhancement and wetlands mitigation components of the ACFCWCD Phase 1 project (the work south of Ardenwood Creek/Line P) had not been completed at the time this EIR was prepared. This involves grading two, 2- to 3-foot-deep off-channel basins that will be connected to Ardenwood Creek. The two basins will occupy about 30 acres, and will serve as temporary floodwater detention structures during periods of high flow in Ardenwood Creek. Some of the graded earth will be relocated to create oak savanna uplands with a riparian planting zone along Ardenwood Creek, and to create elevated areas for flood control/maintenance roads. Some of the excess cut not used on site may be off-hauled to an approved disposal location. This mitigation area will be operated and managed by the ACFCWCD over an initial 7- to 10-year period, after which the

⁴³ Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Chris Barton, Environmental Programs Manager, East Bay Regional Park District, 9 May 2018.

area would be turned over to the Park District for integration into Coyote Hills Regional Park. The site will serve as a mitigation bank for other maintenance projects.

Under Construction Projects

Patterson Ranch Planned District. This project was approved in 2011 for a 428-acre area that includes the Proposed Project site. On a 101-acre portion of the Patterson Ranch Planned District project site, located northeast of Ardenwood Boulevard and the Proposed Project site, 500 single-family residential lots and associated parks, trails, streets and utilities are under construction.

Dumbarton Quarry Regional Recreation Area, Planned District Amendment. This amendment would allow development of a former rock quarry into a 91-acre regional park facility including formal picnic areas, children's playground and play areas, trails, park furniture, parking lots, restroom facilities, turf meadows, overnight camping facilities with a small store, laundry and shower facilities, a 13,000 square foot event center and 150 person outdoor amphitheater with outdoor camp fire pit, and a 1/2-acre corporation and maintenance yard.

Other Planned Projects That Will Not Be Constructed in the Foreseeable Future

As part of the Patterson Ranch Planned District approved in 2011, a 10-acre site on the west side of Ardenwood Boulevard and immediately adjacent to the Proposed Project site was reserved for a city park and a school for up to 1,100 K-6 students. At the time this EIR was prepared, the City of Fremont, Fremont Unified School District, and the Park District were in discussions about the location of the school and a possible land exchange, and it was considered unlikely that the school would be built for another eight to ten years. In addition, the City of Fremont was planning to retain the City park land but had no plans to build a park at this time.⁴⁴ Therefore, these projects are not listed above as Proposed, Approved, or Under Construction.

Cumulative Impacts of the Proposed Project

The effect of the combination of past projects, the current projects identified in the Project vicinity, and probable future projects could result in a significant loss of cultural and archaeological resources, including historic architectural resources, and Native American middens and human remains. This is a significant cumulative impact on cultural resources.

Mitigation measures identified above would reduce the impact of the Proposed Project on archaeological resources, tribal cultural resources, and human remains to a less-than-significant level. Mitigation measures identified above also would reduce the impact of the Proposed Project on the historic Milk House to a less-than-significant level, but would not reduce the impact of disassembly of the Contractors Residence to a less-than-significant level. This component of the Proposed Project would result in a significant unavoidable adverse impact to the historic Contractors Residence. Given the past destructive activities on the Project site, and the significant unavoidable impact on the Contractors Residence, the Project would have a cumulatively considerable impact on cultural resources, when viewed in connection with the effects of past, current and probable future projects. The impact of the Project on cultural resources would be *significant and unavoidable*.

⁴⁴ Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Michael Kent, Michael Kent & Associates, 26 July 2018.

4.3 Transportation and Traffic

This section describes the transportation and traffic conditions in the area surrounding the Coyote Hills Restoration and Public Access Project (Project), and identifies transportation impacts and required mitigation measures associated with the implementation of the Proposed Project. The analysis includes a summary of the relevant regulatory setting and existing conditions, and it addresses potential impacts to intersections and roadway segments; and pedestrian, bicycle, and transit networks. Significant impacts and mitigation measures (as necessary) are identified to address these impacts. This section is based on a transportation report prepared by a qualified transportation engineering consultant.⁴⁵ The transportation report included parking and traffic counts conducted on June 23, 2017 (summertime counts are more likely to capture peak activity at Coyote Hills Regional Park), and an analysis of Level of Service at the intersection of Commerce Drive/Paseo Padre Parkway/Patterson Ranch Road (see **Appendix C**).

Regulatory Framework

Applicable State, County, and local transportation/traffic plans and regulations that are relevant to the Project area are summarized below. Streets in the Project vicinity are generally under the jurisdiction of the City of Fremont. State facilities in the Project vicinity which are under Caltrans' jurisdiction include State Route 84.

State Laws and Regulations

California Department of Transportation (Caltrans)

Caltrans owns and operates California's highway system. SR 84, a Caltrans facility, is a major roadway providing access to the Project area from San Mateo and western Santa Clara counties. Caltrans maintains a volume monitoring program and reviews local agencies' planning documents to assist in its forecasting of future volumes and congestion points.

Local Regulations and Policies

The Metropolitan Transportation Commission (MTC)

The Metropolitan Transportation Commission (MTC) is responsible for transportation planning for the Bay Area as a whole, and is the federally designated Metropolitan Planning Organization for the Bay Area. Its *Regional Transportation Plan* covers a 20-year time framework and is updated every 2 years. The MTC administers State funding for transportation projects.

Alameda County Transportation Commission

The Alameda County Transportation Commission (Alameda CTC) was created by a merger of the Alameda County Congestion Management Agency (ACCMA) and the Alameda County Transportation Improvement Authority (ACTIA) in July 2010. It is managed by elected officials and their representatives from all of the cities in the County, and a County elected official. The merger resulted in a more efficient and streamlined project delivery system for Alameda County transportation projects, including improvements for vehicular safety, travel efficiency, and congestion relief, and for bicycle and pedestrian travel.

The Alameda CTC plans, funds and delivers transportation programs and projects that expand access and improve mobility with the objective of fostering a more vibrant and livable Alameda County. The Alameda CTC coordinates countywide transportation planning and prepares the expenditure plan for the half-cent sales tax approved by Alameda County voters in 2000. This includes preparing

⁴⁵ Parisi Transportation Consulting, *Coyote Hills Regional Park Expansion Traffic Impact Report*, February 2019.

the County-wide Transportation Plan, the Congestion Management Program (CMP), as well as the Countywide Bicycle and Strategic Pedestrian Plans.

The CMP establishes thresholds for designated roadways. For most projects, the Alameda CTC Technical & Policy Guidelines uses a 100-trip PM Peak (increase) threshold, which if exceeded, would require a detailed traffic study. The Park District is not subject to this requirement for projects that generate more than 100 new peak hour trips because it is not considered a “local jurisdiction”.

Several advisory committees, composed of staff representatives from each city and the county, provide technical guidance to the Alameda CTC. In addition, a separate Bicycle and Pedestrian Advisory Committee (BPAC) composed of citizens appointed by the cities and county make recommendations to the Alameda CTC and staff on development and implementation of bicycle and pedestrian programs, including the updating of the countywide plans.

Association of Bay Area Governments (ABAG) San Francisco Bay Trail

Senate Bill 100, passed into law in 1987, directed ABAG to develop a plan for a trail around the Bay. The *Bay Trail Plan*, adopted by ABAG in 1989, described the 500-mile proposed alignment; design guidelines for trail width, surface, and grades; a set of policies to guide the future selection, design, and implementation of routes; and strategies for implementation and financing.^{46 47} The *Bay Trail Plan* describes a main alignment or Bay Trail spine, and side trails, called Spur Trails, where the Bay Trail does not follow the shoreline. Although ABAG is not a regulatory agency, the *Bay Trail Plan* provides guidance that is used by cities, counties, and special districts in planning for non-motorized vehicles. Projects are evaluated for adherence to the *Bay Trail Plan* policies and routes. In the Project vicinity, the designated Bay Trail is the concrete path on the west side of Ardenwood Boulevard and Paseo Padre Parkway south of Alameda Creek.

City of Fremont

City of Fremont General Plan

Applicable Goals, policies and implementation programs contained in the Fremont General Plan⁴⁸ include:

Goal 3-1: Complete Streets: City streets that serve multiple modes of transportation while enhancing Fremont’s appearance and character.

Policy 3-1.3: Transit-Friendly Street Design. As appropriate, apply street design and development standards that require transit-supportive facilities such as bus stop curb extensions, bus shelters, benches, lighting, sidewalks, and convenient access to bus stops.

Implementation 3-1.3.A: Bus Stop Locations. Work with transit providers to ensure that bus stops and shelters are sited in appropriate locations and are designed to maximize rider comfort and safety.

⁴⁶ Alameda County Transportation Commission website, www.actc.org,

⁴⁷ABAG, 2009. *Bay Trail Plan*. Adopted July 1989.

⁴⁸ City of Fremont, 2011. *City of Fremont General Plan*. Adopted December 2011.

Implementation 3-1.3.B: Designing With Transit. Utilize guidelines provided by transit providers for accommodating transit vehicles on city streets and incorporating transit facilities into new development and redevelopment.

Policy 3-1.5: Improving Pedestrian and Bicycle Circulation. Incorporate provisions for pedestrians and bicycles on city streets to facilitate and encourage safe walking and cycling throughout the city.

Implementation 3-1.5.B: Bike Route Design. On designated bike routes, develop striped bicycle lanes and off-road bicycle trails rather than shared bike/auto lanes. Design standards for bicycle lanes and trails should be consistent with those used by the State of California.

Implementation 3-1.6.C: Pedestrian Crosswalks at Signalized Intersections. Provide enhanced pedestrian crossing times at locations with high pedestrian volumes and with large numbers of special needs and/or elderly residents. Install “countdown crosswalks” to improve the safety of pedestrian crossings. Also, consider the use of diagonal crosswalks at appropriate locations which require motorists in all directions to periodically stop for pedestrian crossings from all four corners of an intersection.

Goal 3-2: Reducing Vehicle Miles Traveled. Improve mobility in Fremont while reducing the growth of vehicle miles traveled.

Policy 3-2.3: Pedestrian Networks. Integrate continuous pedestrian walkways in Fremont’s City Center, Town Centers, residential neighborhoods, shopping centers, and school campuses. Place a priority on improving areas that are not connected by the City’s pedestrian network, with the objective of making walking safer, more enjoyable, and more convenient.

Implementation 3-2.3.E: Improving Pedestrian Mobility. Improve crossings for pedestrians at key intersections through pavement changes, curb redesign, landscaping, countdown crosswalks, and other measures which improve safety and ease of travel.

Implementation 3-2.4.B: Connecting the Trail System. Connect recreational trails in City and regional parks, access trails along creeks and flood control channels, and sidewalks and bike lanes on local streets to fill the gaps and improve the continuity of the city’s bike and pedestrian trail system. Require right-of-way dedication from development projects to complete the system.

Policy 3-2.6: Bus Service Improvements. Achieve a level of public bus service that makes taking the bus a convenient, affordable, reliable, and safe alternative to driving.

Implementation 3-2.6.A: Bus Transit Improvements. Work with local bus transit providers to improve service levels in Fremont, and to adjust routes to maximize access to transit by persons who live or work in Fremont. A priority should be placed on improving feeder service from neighborhoods to BART, improving service between the five Town Centers, improving north-south service on Fremont Boulevard, closing service gaps in the Ardenwood and Warm Springs areas, and providing better service to local institutions. Improving feeder service to BART is particularly important, as it can reduce the necessity of driving to the BART station. This can reduce parking demand around BART, as well as overall vehicle miles traveled.

Goal 3-3: Accessibility, Efficiency and Connectivity. Maximize the efficiency of the transportation network, and its ability to connect the city, minimize travel distances, and increase mobility for all residents.

Policy 3-3.6: Road Hazards. Minimize road hazards associated with overgrown vegetation, structures blocking sight lines, and other visual obstructions. New development should be reviewed to ensure that ingress and egress locations, driveways, crosswalks, and other circulation features, are sited to minimize accident hazards.

Implementation 3-3.6.A: Traffic Control Devices. Install traffic control devices (signals, stop signs, etc.), streetlights, and other measures to enhance safety and reduce road hazards.

Goal 3-4: Balancing Mobility and Neighborhood Quality. A transportation system that balances speed and convenience with the desire to have walkable neighborhoods and an enhanced sense of place.

Policy 3-4.2: Variable Level of Service Standards. Adopt variable standards for traffic speed and travel delay that recognize the character of adjacent land uses, the functions of different streets, the different modes of transportation on a street or corridor, and other community development goals. The following standards shall apply: For locations outside of the City Center, Town Centers, and Warm Springs / South Fremont BART Station area (as depicted on the Future Land Use Map), peak hour levels of service for signalized intersections should generally be maintained at Level of Service (LOS) “D” for minor arterials and collector streets, and LOS “E” for regional (CMA network) arterials. The design and construction of new signalized intersections and roadways in areas outside the City Center, Town Centers, and Warm Springs BART Station area should achieve a target operational capacity of midpoint LOS D or better upon completion.

Implementation 3-4.2.A: Redefining Level of Service (LOS). Develop new ways of calculating LOS which are based on people rather than vehicles. Such measures could take into account the relative volumes of transit users, pedestrians, carpoolers, and bicyclists passing through an intersection or along a road segment during a given time period and not solely the number of cars. Until new standards are developed, the City will continue to use its current standards and methods for calculating LOS.

Implementation 3-4.2.B: Multi-Modal Design. Adopt a formalized procedure for evaluating and analyzing intersections that considers the needs of each transportation mode and its relationship to adjacent land uses.

Implementation 3-4.2.C: Improvements to Other Travel Modes. Require improvements to transit, bicycle, and pedestrian modes when vehicular improvements would be inconsistent with Policy 3-4.2.

Policy 3-4.3: Allowing Decreased Levels of Vehicle Speed and Convenience. In addition to the conditions stated in Policy 3-4.2, allow decreased levels of speed and convenience on a case by case basis in areas where:

- Widening or altering a roadway would conflict with environmental, historic, or community character objectives;
- A significant cause of the congestion is regional traffic beyond the City’s control;
- Substantial transportation improvements have already been required and further mitigation is not feasible;
- There are other factors related to accommodation of pedestrians, bicyclists, and public transit, and road improvements that may be substantially detrimental to the desired capacity, convenience, safety, or efficiency of these other travel modes; or

- Congestion is of a limited duration due to special events or organized activities at local public facilities.

Implementation 3-4.3.A: Conditions for Allowing Reduced LOS. Develop specific findings, conditions, and/or CEQA thresholds for reduced roadway levels of service. Until a new approach for mitigating traffic impacts is developed, existing operating procedures shall be followed.

Policy 3-4.7: Transportation and the Environment. Ensure that investments in transportation infrastructure, including roads, BART, rail lines, bus-only lanes, bike lanes, and pedestrian bridges are sited and designed in a way that complements the natural and built environments.

Implementation 3-4.7.A: Transportation and Sensitive Natural Features. Ensure that proposed transportation facilities are designed and constructed to avoid or minimize potential impacts on wetlands, steep slopes, and other environmentally sensitive areas.

Implementation 3-4.7.B: Transportation and Historic Resources. Ensure that transportation improvements respect and conserve identified historic structures, sites and landmark trees whenever feasible.

Policy 3-5.2: Regional Trail Development. Promote and coordinate the planning of pedestrian and bicycle trail systems with Alameda County, Newark, Milpitas, Union City, Santa Clara County, ABAG, BCDC, Park District, SFPUC, ACFC, and other jurisdictions and organizations. In addition to the City of Fremont's Bicycle Master Plan, there is also a Countywide Bicycle Plan for Alameda County. One of the purposes of the Countywide Plan is to coordinate the efforts of the cities, the East Bay Regional Park District (which has its own Bicycle Plan), and other agencies that do more localized or focused bicycle planning. The Countywide Plan also focuses on linkages to adjacent counties.

Implementation 3-5.2.A: Bay Trail and Ridge Trail. Support completion of the Bay Trail and the Ridge Trail through Fremont and establish trail connections across the city between these two regional networks.

Policy 3-5.5: Coordination with Adjacent Cities and Other Public Agencies Coordinate with Newark, Milpitas, Union City, and other nearby jurisdictions and local public agencies to ensure compatible plans and road development standards and to coordinate major transportation investments. This should include coordination with the Fremont Unified School District on the provision of school bus service and school-related traffic issues.

The 2018 Fremont Bicycle Master Plan⁴⁹ also includes specific goals, policies and actions intended to guide bicycle program implementation within the City. Relevant goals, policies and actions include:

Goal 1: Implement a safe, convenient, connected, and comfortable citywide bicycling network for people of all ages and abilities who live, work, and visit Fremont.

Policy 1-1: Implement the All Ages and Abilities Vision Bicycle Network presented in the 2018 Bicycle Master Plan, with a focus on access to and connection between the Priority Development Areas (PDAs), transit stations, and employment centers.

Action 1-1.A: Implement the near-term All Ages and Abilities Backbone Network identified in Chapter 5 by 2021 so that anyone living, working or visiting Fremont is always within 1/2 mile of the bikeway network, or 1/4 mile if they are within the PDAs.

⁴⁹ Fehr & Peers, City of Fremont Bicycle Master Plan, Adopted by City Council on July 10, 2018.

Policy 1-2: Provide maintenance and targeted expansion of the City’s trail system that integrates seamlessly with the on-street bicycle network, serves its diverse population, and respects and protects the integrity of its natural and cultural resources.

Action 1-2A: Coordinate closely with East Bay Regional Parks District, San Francisco Bay Trail, and neighboring jurisdictions in planning, designing, and funding Fremont’s trail system.

Action 1-2B: Coordinate with stakeholders and across City departments to ensure that all development and roadway projects shall implement bikeways and paths, such as the East Bay Greenway, Niles Canyon Trail, Dumbarton Bridge to Quarry Lakes Trail, Bay Trail, and Public Utility Commission trails and provide access points to these.

Action 1-2C: Enhance access to trails from the City’s roadway network through the provision of paths, walkways, trail crossings, curb cuts, and other infrastructure to integrate parks, open space, and trails with the City’s on-street bicycle network and sidewalk network.

Goal 2: Prioritize bicycle safety to support the City’s Vision Zero Policy to significantly reduce fatalities and severe injuries by 2020.

Policy 2-1: Work to reduce the rate of injury bicycle crashes, particularly fatal and severe injuries, to zero.

Action 2-1D: Prioritize bicyclists as the City implements its *Vision Zero Policy Action Plan*, such as through the installation of the all ages and abilities bikeways and intersection improvements, and expanding bicycle safety programs.

Policy 2-2: Proactively plan and design all streets as complete streets to address citywide bicycle safety and design for people of all ages and abilities.

Action 2-2A: Implement the citywide low-stress All Ages and Abilities Backbone Network, including protected intersections and/or bicycle signals at major intersections, as outlined in Chapters 4 and 5.

Action 2-2C: Install traffic calming improvements on neighborhood bikeways and increase funding for traffic calming throughout the City.

Goal 3: Use best practices and innovative but tested bicycle designs to implement a continuous, comprehensive low-stress bicycle network to serve all ages and abilities.

Policy 3-1: Plan and design for low traffic stress facilities for bicyclists on the five-year All Ages and Abilities Backbone Network, All Ages and Abilities Vision Network, and new streets.

Action 3-1A: Design bikeways for the “interested but concerned” population of Fremont who tolerate a very low level of traffic stress, such as children, seniors, and those who may be new to biking and do not want to ride in traffic.

Action 3-1B: Ensure that low levels of traffic stress on the All Ages and Abilities Vision Network are maintained at intersections through protected intersections, removed or

modified slip lanes, bicycle signals, turning support, and crossing enhancements on neighborhood bikeways.

Action 3-1C: Provide and maintain signal detection for bicyclists at all intersections, including on side streets and in left-turn pockets.

Action 3-1D: On residential Class III neighborhood bikeways, provide traffic calming to reduce speeds and, where needed, traffic volumes to maintain a low-traffic stress, family-friendly bicycle environment. At neighborhood bikeway crossings with major roadways, provide enhanced crossings to reduce the level of traffic stress at intersections.

Policy 3-2: Coordinate and cooperate across City departments to maximize funding to build out the All Ages and Abilities Backbone and All Ages and Abilities Vision bicycle networks, utilizing dedicated funding streams for bicycling in addition to strategically folding bicycle projects into other typical CIP projects and routine maintenance programs.

Action 3-2A: Continue to work across City departments to routinely identify and integrate bicycle improvements into all standard maintenance (e.g., overlays and repaving), planning studies, roadway redesign, and auto-focused CIP projects (e.g., new signals or signal modifications). Work across City departments to prioritize roadways with existing or proposed bicycle facilities within routine maintenance work and to stripe/restripe meaningful bikeway segments such that they have logical start/end points within the context of the bicycle network, even if this goes beyond the limits of work of routine maintenance projects.

Goal 6: Facilitate coordination and cooperation in the development of the bicycle network.

Policy 6-1: Integrate Fremont's bikeway network with adjacent jurisdictions and Alameda County to ensure regional connectivity.

Activity 6-1A: Establish regular communications and coordinate projects as needed between Union City, Milpitas, Newark, East Bay Regional Park District, BART, AC Transit, Caltrans, and other local agencies regarding bicycle planning issues.

City of Fremont Traffic Impact Study Guidelines

Per the City of Fremont's traffic impact study guidelines, the study intersections were analyzed using methodologies published in the Highway Capacity Manual (HCM), Transportation Research Board, 2000. The HCM 2000 methodology defines intersection performance based on a concept called "level of service." Vehicle delay is a method of quantifying several intangible factors, including driver discomfort, frustration, and lost travel time.

For unsignalized intersections, level-of-service criteria are divided into two intersection types: all-way stop sign-controlled and side-street only stop sign-controlled. All-way stop-controlled intersection level of service is expressed in terms of the average vehicle delay of all the movements. Side-street only stop sign-controlled intersection level-of-service is defined in terms of the average vehicle delay for an individual approach. Typically, the delay of a side-street-only stop sign-controlled intersection applies to the minor approaches because the major approach does not experience any delay. However, individual movement delay thresholds also apply to movements subject to yield control, like permitted left turns from the major-street approach. **Table 4.3-1** summarizes the level-of-service criteria for unsignalized intersections.

For signalized intersections, level-of-service is measured in terms of the average total vehicle delay of all movements through the intersection. Vehicle delay at a signalized intersection is based variables that include traffic signal phasing, signal cycle length, and traffic volumes with respect to intersection capacity. **Table 4.3-1** also summarizes the level-of-service criteria for signalized intersections.

TABLE 4.3-1 INTERSECTION LEVEL OF SERVICE AND DELAY DEFINITIONS

Level of Service	Description	Signalized Delay	Unsignalized Delay
A	Insignificant	0 to 10 seconds	0 to 10 seconds
B	Minimal	> 10 to 20 seconds	> 10 to 15 seconds
C	Acceptable	> 20 to 35 seconds	> 15 to 25 seconds
D	Tolerable	> 35 to 55 seconds	> 25 to 35 seconds
E	Significant	> 55 to 80 seconds	> 35 to 50 seconds
F	Excessive	> 80 seconds	> 50 seconds

Source: Transportation Resource Board, Highway Capacity Manual, 2000

The City of Fremont’s LOS standards define acceptable intersection operations at LOS D or better during peak hours at all city-operated signalized intersections. The City does not have a significance threshold for unsignalized intersections.

Existing Conditions

Setting

The scope of this analysis, the analysis methodology, the existing setting for transportation and circulation issues, and an analysis of future transportation and circulation issues are described below.

Vehicular Access

The following section describes the vehicle, pedestrian, and bicycle facilities, and transit service that provide access to the Project site.

Regional Access Routes

Regional access in the vicinity of the Project site is provided via the following routes:

Interstate 880 (I-880) is a major regional freeway that runs in the north-south direction through Fremont, serving the East Bay and South Bay, and connecting State Route 17 (SR 17) in San Jose to I-980 in Oakland. In the vicinity of the study area it has three mixed-use lanes plus a High Occupancy Vehicle lane in each direction. I-880 provides access to the study via the interchanges at Decoto Road and via Alvarado/Fremont Boulevard.

State Route 84 (SR 84) runs in the east-west direction connecting U.S. 101 on the peninsula and I-880 in Fremont. The roadway has six lanes (three lanes in each direction) and becomes Decoto Road east of I-880. SR 84 provides access to the study area via the interchanges at Ardenwood Boulevard/Newark Boulevard and Paseo Padre Parkway/Thornton Avenue.

Local Access Routes

Local access in the vicinity of the Project site is provided via the roadways discussed below:

Paseo Padre Parkway is a major arterial that extends almost the full length of the City of Fremont, north to south. In the project vicinity, it provides access between Interstate 880 (I-880) and the City of Newark. In the Project vicinity, Paseo Padre Parkway runs in the north-south direction and has two lanes in each direction near the Project; on-street parking is not allowed. The posted speed limit is 45 MPH. After the existing Coyote Hills Regional Park was established, the capacity of Paseo Padre Parkway was increased to its current four-lane configuration.

Commerce Drive runs in the east-west direction between Paseo Padre Parkway and Tupelo Street. Between Paseo Padre Parkway and Ardenwood Boulevard, the posted speed limit is 35 MPH. Between Ardenwood Boulevard and Tupelo Street, the speed limit is 25 mph. Commerce Drive services office uses between Paseo Padre Parkway and Ardenwood Boulevard, and recreational and residential uses between Ardenwood Boulevard and Tupelo Street. It has one through lane and one parking lane in each direction. Parking is restricted between Paseo Padre Parkway and Ardenwood Boulevard.

Patterson Ranch Road is the primary vehicular access to the Park and provides connection to multiple trails that connect at the Park. The road has two lanes and runs east-west within the Project study area.

Ardenwood Boulevard is a four-lane arterial running north-south between Alameda Creek and Fremont City Limits / SR-84. North of Paseo Padre Parkway, Ardenwood Boulevard becomes Union City Boulevard, and is one alternative route to Interstate 880. South of State Route 84 /Fremont City Limits, Ardenwood Boulevard becomes Newark Boulevard. Ardenwood Boulevard has a posted speed limit of 40 mph and runs along a short section of the Park's east boundary.

Paseo Padre Parkway / Patterson Ranch Road / Commerce Drive is a four-legged, unsignalized intersection. Both Patterson Ranch Road and Commerce Drive are subject to minor-approach stop control (east and west legs); Patterson Ranch Road is not subject to traffic control, although traffic is required to yield to pedestrians and bicyclists in the crosswalks. The right turn movements from northbound Paseo Padre Parkway and Commerce Drive provide channelized turn lanes ("pork chops") subject to yield-control to pedestrians and intersecting traffic. There are marked crosswalks at all four legs of the intersection.

Public Transit

Public transportation currently provided in the vicinity of the Project includes bus, train, and paratransit services. Bus service within the community of Fremont and the surrounding cities of Union City, Newark, Hayward, and Milpitas is primarily provided by Alameda Contra Costa Transit District (AC Transit), while rapid rail transit is provided by Bay Area Rapid Transit (BART). Inter-city passenger rail service is provided by the Amtrak Capitol Corridor route and Altamont Corridor Express (ACE). Capitol Corridor serves Fremont, Hayward, Oakland, and San Jose, while ACE connects San Jose, Santa Clara, Fremont, and Pleasanton. The public transit in the area is described below.

BART

The BART system constitutes the spine of the regional transit network. BART trains run between Millbrae in the west, Pittsburg in the east, Fremont in the south, and Richmond in the north. Nearby BART stations are located in the City of Fremont and Union City. The Fremont station near Mowry

Avenue and Civic Center Drive, approximately 6 miles from the Project site. The Union City station address is 10 Union Square, 4 miles away. AC Transit provides local bus service from the BART stations in the vicinity of the Project site.

AC Transit

Alameda-Contra Costa County (AC) Transit provides bus transit service to cities in the East Bay. The nearest transit stops to the Project study area are located at the intersection of Ardenwood Boulevard and Commerce Drive, 1500 feet east of Paseo Padre Parkway.

Route SB is a regional commuter route between San Francisco and Fremont. Route SB travels along Ardenwood Boulevard and Union City Boulevard in the vicinity of the Project site. Route SB only operates on weekdays, in the westbound direction between 5:25 a.m. and 9:00 a.m. and in the eastbound direction between 4:00 p.m. and 8:00 p.m. on 30-minute headways.

Route 232 is a local route that travels along Paseo Padre Parkway and Ardenwood Boulevard. Route 232 operates between NewPark Mall in the City of Newark and the Fremont BART station; it also stops at the Union City BART station. Route 232 operates with 60-minute headways on weekdays between 5:30 a.m. and 7:30 p.m. and during the weekend between 7:30 a.m. and 7:30 p.m.

Route 621 is a school service route open to the public that travels along Paseo Padre Parkway and Ardenwood Boulevard. Route 621 is a single-bus route that starts at the intersection of Ardenwood Boulevard & Commerce Drive starting every weekday at 7:15 am and ending at Thornton Jr. High School. The returning bus starts at Thornton Jr. High School at 1:00 p.m. on Wednesday and 2:45 p.m. all other weekdays.

East Bay Paratransit

East Bay Paratransit is a service of AC Transit and BART that provides transportation for people who, because of a disability, cannot access, board, or ride public transportation. East Bay Paratransit serves all overlapping AC Transit and BART service areas in Contra Costa and Alameda Counties.

Santa Clara Valley Transportation Authority

Santa Clara Valley Transportation Authority provides connecting service to AC Transit routes that serve the Project site. Santa Clara Valley Transportation Authority operates buses, light rail, and paratransit services for Santa Clara county commuters. A Santa Clara Valley Transportation Authority bus serves the Fremont BART station and provides service to Santa Clara County.

Amtrak

Amtrak provides intercity passenger rail throughout the U.S. In the vicinity of the Project site, Amtrak's Capital Corridor route provides passenger rail service from Oakland, Emeryville, Berkeley, Richmond, and Hayward to Sacramento and points beyond to the east and to San Jose in the south. The San Joaquin route provides service to the San Joaquin and Central Valleys. The Amtrak stations in Fremont and Hayward are near enough to the Project area to allow intermodal access. The Fremont (Centerville) station is located on Fremont Boulevard and is accessible to AC Transit Route U, which goes to the Stanford University campus in Palo Alto. The Fremont station is located at 37260 Fremont Blvd.

Altamont Corridor Express

Altamont Corridor Express (ACE) is a commuter rail service connecting Stockton and San Jose. In the vicinity of the Project site, the ACE rail line provides service from Santa Clara, Emeryville, Berkeley, Richmond, and Hayward to Sacramento and points beyond to the east, and to San Jose in the south. The ACE Fremont station is a shared facility with Amtrak.

Bicycle and Pedestrian Access

There are several bicycle and pedestrian facilities in and near the Project site, most notably the paved section of the San Francisco Bay Trail which runs along the east side of the Project area.

Bikeways

Bicycles are permitted on all roads in Fremont, with the exception of access controlled freeways such as I-880. The 2018 Fremont Bicycle Master Plan designates bicycle facility classifications for Fremont. In the vicinity of the Project area, the existing system consists of three classifications of bicycle facilities:

- Class I facilities (bike paths) are completely separated from roadways, with paved bicycle/pedestrian paths that excludes general motor vehicle traffic;
- Class II facilities (bike lanes) provide a striped and stenciled lane on each side of a street or highway; and
- Class III facilities (bike routes) are a shared use roadway with motor vehicle traffic identified only by signage.

In the Project vicinity, Class II bicycle lanes are provided on Paseo Padre Parkway and Ardenwood Boulevard, in addition to a Class I bike path (Bay Trail) on the west side of Ardenwood Blvd. and Paseo Padre Parkway south of Alameda Creek. On Paseo Padre Parkway, the existing bicycle lanes are a five- to six-foot paved area demarcated by a painted line. There is no additional vertical or horizontal buffer provided between bicycle and vehicle traffic on Paseo Padre Parkway. A Class I bike path (Tuibun Trail) is located parallel to Patterson Ranch Road between Paseo Padre Parkway and the Coyote Hills Regional Park. Another Class I bike path (the Alameda Creek Regional Trail) travels along the south side of Alameda Creek and Crandall Creek (K-line channel), adjacent to the Project area. There are pedestrian crosswalks and walk signals installed at the intersection of Ardenwood Boulevard and Paseo Padre Parkway. There are no marked bikeway facilities on Commerce Drive and Patterson Ranch Road.

Existing Bicycle Conditions

Bicycling to the Park is growing in popularity with the construction of the San Francisco Bay Trail extension.

For bicyclists crossing Paseo Padre Parkway, crosswalks at the intersection of Patterson Ranch Road/Commerce Drive/Paseo Padre Parkway are delineated with transverse pavement markings, i.e., two parallel, 12-inch white lines. The crosswalks do not have pedestrian crossing warning signs in advance of the intersection and at the crossing itself. Although not required at all crosswalks by the CA MUTCD, pedestrian crossing warning signs are recommended at high-speed roadways with more than one lane in each direction. Flashing beacons are recommended when justified by pedestrian, bicycle, and vehicle traffic.

Along Paseo Padre Parkway, the northbound bike lane at Patterson Ranch Road/Commerce Drive discontinues approximately 280 feet in advance of the intersection. Where the bike lane is discontinued, there is a 150-foot section where a northbound right turn pocket begins. The unmarked area is the intended weaving⁵⁰ area for northbound vehicles to cross the bikeway to enter the right turn pocket. The bikeway resumes approximately 130 feet from the intersection. The northbound bike lane on Paseo Padre Parkway north of the study intersection runs for approximately

⁵⁰ Weaving: one movement crossing the path of another along a length of road without the aid or signals or other traffic control devices.

130 feet, and then discontinues again for approximately 140 feet; this unmarked area is the weaving area for westbound right turning vehicles to merge onto northbound Paseo Padre Parkway. In the southbound direction on Paseo Padre Parkway, the bike lanes continue up to the intersection and are demarcated with 200 feet of dashed striping.

The bike lanes on Patterson Ranch are generally designed consistently with California Manual on Uniform Traffic Control Devices (CA MUTCD) guidance on bike lanes and right turn pockets. However, the design lacks both required and optional features that would improve the safety for bicyclists traveling next to high speed traffic (>45 MPH). Among the required elements, the northbound weaving areas lack a required sign, R4-4, "BEGIN RIGHT TURN LANE YIELD TO BIKES". Among the optional elements, there are no dashed lines, signs or markings to indicate to weaving traffic the presence of bicycle traffic. A shorter weaving distance, combined with additional pavement markings, could slow vehicle traffic making the weaving maneuver.

Trails

The San Francisco Bay Trail is a partially completed 500-mile walking and cycling path around the entire San Francisco Bay running through all nine Bay Area counties. In the Project area, the Bay Trail runs along the west side of Ardenwood Boulevard and Paseo Padre Parkway, ending about 400 feet north of Dumbarton Circle. There is a planned route to connect to Alameda Creek Trail and Union City Boulevard on the north side of the Project site. To the south, the Bay Trail connects with the Dumbarton Bridge via on-street bike lanes (Class II bikeways) and Coyote Creek Trail. Pedestrian access into the Park is also provided by the Tuibun Trail, which runs parallel to Patterson Ranch Road between Paseo Padre Parkway and the Visitor Center.

Sidewalks

There are 10-foot sidewalks on the east side of Paseo Padre Parkway and an eight-foot sidewalk on south side of Commerce Drive. Pedestrian access on the west side of Paseo Padre Parkway is provided by the Bay Trail. Pedestrian access along Patterson Ranch Road is provided by the Tuibun Trail.

Existing Pedestrian Conditions

Walking is an increasingly popular way for people to visit Coyote Hills Park. Some park visitors park on Commerce Drive and walk across Paseo Padre Parkway into the park. Employees in the offices east of Paseo Padre Parkway reportedly walk to the Park for recreation throughout the day.

As discussed above, crosswalks at the intersection of Patterson Ranch Road/Commerce Drive/Paseo Padre Parkway are delineated with transverse pavement markings, i.e., two parallel, 12-inch white lines. The crosswalks do not have pedestrian crossing warning signs in advance of the intersection and at the crossing itself. Although not required at all crosswalks by the CA MUTCD, pedestrian crossing warning signs are recommended at high-speed roadways with more than one lane in each direction. Flashing beacons are recommended when justified by pedestrian and vehicle traffic.

There are curb ramps at all four corners and overhead roadway lights at the northeast and southwest corners. The northeast and southeast corners (Commerce Drive approach) are configured with a channelized right turn lane and a Type C pedestrian passageway. The resulting corner curb radii with the right turn channels are approximately 60 feet. Large corner curb radii typically facilitate fast turns by vehicles. There are no median refuges for pedestrians crossing Paseo Padre Parkway.

Project Site Access

Primary access to the Project is provided via Paseo Padre Parkway with direct vehicular access to Coyote Hills via Patterson Ranch Road.

Existing Parking

There are currently 402 parking spaces, plus 440 overflow spaces and 61 informal spaces at Paseo Padre/Patterson Ranch Road, or a total of 903 parking spaces, at Coyote Hills Regional Park. Parking within the park is distributed among several trail staging and parking areas which are located at Willow Run, Chert Flat, the Visitor Center and Cheeyish Valley, as well as a gravel parking area located on the southwest corner of Paseo Padre Parkway and Patterson Ranch Road that developed a pattern of informal staging/parking prior to the parcel being donated to the Park District. **Table 4.3-2** provides an overview of the existing parking supply. Currently, there are a limited number of paved parking spaces in the park, including two ADA accessible spaces, all of which are located at the Visitor Center at the end of Patterson Ranch Road. Paved spaces are desirable because paved/marked spaces result in orderly operations, the least amount of wasted parking space and all weather availability. There are two bicycle racks at the Visitor Center that provide short term parking for ten bicycles.

TABLE 4.3-2 COYOTE HILLS REGIONAL PARK – EXISTING PARKING SUPPLY⁵¹

Parking Area/Surface	Willow Run	Chert Flat and Cheeyish Valley Existing Overflow Parking Area	Dairy Glen	Visitor Center (includes 2 ADA spaces)	Kiosk Area Existing Overflow Parking	Informal Parking Lot (Paseo Padre at Patterson Ranch Road)	Sub Total
Asphalt				29			29
Gravel	25	120		40		61	246
Mowed Grass	300	160	8		160		628
Sub Total	325	280	8	69	160	61	903
Grand Total							903

Standards of Significance

Transportation and traffic impacts associated with the Proposed Project would be considered significant if the Plan would:

- 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.

⁵¹ Coyote Hills Regional Park Land Use Plan, 2005, and parking user counts

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

Impact Discussion

- a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system.

Proposed Project

The Coyote Hills Restoration and Public Access Project would restore habitat and add public access facilities to a 306-acre parcel that would become part of Coyote Hills Regional Park. The proposed Park expansion includes a new entry kiosk, 100-car accessible parking lot, restroom and family picnic facilities, entry area improvements, park signage, approximately four miles of hiking trails, wildlife viewing platforms, and approximately 150 acres of habitat restoration and enhancement lands. The Proposed Project would also reconfigure the main Park entrance and formalize 20 new parking spaces (i.e., pave and mark vehicle parking) that currently occurs in an unpaved area west of Paseo Padre Parkway.

Vehicle Trip Generation

The existing peak hour vehicle trip generation at the park was estimated based on traffic counts of vehicles entering and exiting from Patterson Ranch Road at Paseo Padre Parkway. Traffic counts were collected on a typical weekday, June 23, 2017, and ingress and egress is summarized in **Table 4.3-3**. Traffic counts collected in June 2017, a summer month, were found to be similar to the traffic counts under typical (non-summer) conditions collected on Paseo Padre Parkway for the Ardenwood Technology Park traffic study.⁵² Although the park generates higher traffic on weekends, maximum park impacts on traffic would occur during weekday peak periods, when overall traffic levels are highest. Therefore, the analysis below focuses on weekday peak period impacts on traffic.

TABLE 4.3-3 COYOTE HILLS REGIONAL PARK EXPANSION TRIP GENERATION

Scenario and Approach	AM Peak Hour (7-9 AM)			PM Peak Hour (4-6 PM)		
	In	Out	Total	In	Out	Total
Existing Trip Generation	16	7	23	17	22	39
Plus Project Growth (25%)	4	1	5	4	5	9
Existing plus Project Trip Generation	20	8	28	21	27	48

The East Bay Regional Park District estimates that the park expansion would result in 25 percent more visitors during weekday AM and PM peak hours.⁵³ The Proposed Project would increase the size of Coyote Hills Regional Park by approximately 25 percent (306 acres added to 1,266 existing acres). The estimated 25 percent Project-generated increase in trips results in 5 AM peak hour trips (.02 trips/acre) and 9 PM peak hour trips (.03 trips/acre) shown in **Table 4.3-3**, above.

Both the existing trip generation and forecast growth are relatively modest compared to the adjacent traffic on Paseo Padre Parkway for several reasons. First, the park is largely unprogrammed open

⁵² W-Trans (2016) Traffic Impact Study for Ardenwood Technology Park.

⁵³ Matt McDonnell, Park Supervisor, Coyote Hills Regional Park, personal communication with Jeff Peters, Owner/Principal, Questa Engineering, Inc., 21 June 2018.

space that would not attract an intensity of users compared to City parks with more active recreation amenities (e.g., recreational fields). Second, open space park trips more typically occur outside the weekday commute peak or on weekends, whereas typical traffic analysis periods are weekday morning (AM) and afternoon (PM) commute peak hours. Although the park’s trip generation may be higher outside the typical weekday peak hours, the park’s impact at these times on the surrounding transportation network would be less because the transportation network would be experiencing less overall demand.

The Institute of Traffic Engineers (ITE) *Trip Generation, 9th Edition* provides estimates on trip generation for county and state parks (LU 412 and 413, respectively). However, the ITE trip rates were not used, for the following reasons:

ITE trip rates are based on county parks surveyed in 1970s and 2000s in New Jersey, California and North Carolina. Site amenities and programming varied widely: location, boating/swimming, ball fields, soccer fields, campsites, picnic facilities, and general open space. Parks sampled by ITE ranged from less than 100 acres up to 1,200 acres. In the AM peak hour, the ITE average rate is 0.02 trips/acre, and in the PM peak hour, the average rate is 0.09 trips/acre. However, the park trip rates were highest for the smallest (<100 acres) and largest parks (1,150 acres), which had 10-12 AM peak hour trips and 65-75 PM peak hour trips. The park trip rates were lowest for the two mid-size parks (250 and 550 acres); 2-5 AM peak hour trips and approximately 25 PM peak hour trips. Thus, there is no correlation between park acreage and trips generated (i.e., low R-squared value).

The Project-generated trip estimation matches ITE average trips/acre for the AM peak (0.02 trips/acre, or a 5-6 trip increase for the Proposed Project), and is lower than the trips/acre for the PM peak (0.09 trips/acre, or a 27 trip increase for the Proposed Project). However, as discussed above, there is no correlation between park size and ITE trip rates. Therefore, the traffic study’s estimate of a 25 percent increase in trips is the best available because it is proportional to Coyote Hill Regional Park expansion size, and the number of trips is within the range of observations collected by ITE. The lower rate estimated for the Proposed Project in the PM peak hour is reasonable because Coyote Hills primarily serves as an open space park, rather than providing more intensively used facilities such as sports fields or campsites.

Existing Plus Project Conditions

The Existing conditions scenario estimates the current vehicle delay at the intersection based on the traffic counts collected during the weekday a.m. and p.m. commute peak periods, which includes the existing vehicle traffic generated by the Coyote Hills Regional Park. The Existing plus Project conditions estimate vehicle operations at the study intersection with the addition of vehicle trips associated with the Proposed Project (**Table 4.3-3**). The Existing and Existing plus Project level of service for the study intersection are summarized in **Table 4.3-4**.

TABLE 4.3-4 EXISTING BASE AND PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

Scenario and Approach	Control	AM Peak Hour		PM Peak Hour	
		LOS	Delay	LOS	Delay
Existing					
Westbound Commerce Drive	Stop	C	19.8	E	40.6
Eastbound Patterson Ranch Road	Stop	E	35.7	D	26.1
Existing plus Project					
Westbound Commerce Drive	Stop	C	21.1	E	40.9
Eastbound Patterson Ranch Road	Stop	E	38.8	D	26.2

As discussed above, the City of Fremont does not have a significance threshold for unsignalized intersections. For purposes of this analysis, the City's threshold of Level of Service D for signalized intersections was applied to the unsignalized intersection of Patterson Ranch Road/Commerce Drive/Paseo Padre Parkway. Under Existing conditions, eastbound Patterson Ranch Road operates at a level of service below the LOS "D" threshold during the morning peak hour, while westbound Commerce Drive operates at a deficient LOS during the afternoon peak hour. With the addition of the Project-generated traffic (five total trips in the morning peak hour and nine total trips in the afternoon peak hour), the delay per approach is forecast to increase by approximately three seconds at Patterson Ranch Road, and by less than one second at Commerce Drive. Under Existing and Existing plus Project conditions, the vehicles along Paseo Padre Parkway do not experience delay except when yielding to oncoming traffic when making a left turn.

Actual delays may be higher than those calculated by the Highway Capacity Manual. Vehicles turning left onto Paseo Padre Parkway from the minor street approaches must find gaps in two directions of traffic. This maneuver is particularly challenging when the intersecting traffic is traveling at high speed, since minor street vehicles need a larger time and space gap (compared to intersecting traffic at lower speeds) to clear the intersection and accelerate to the prevailing traffic speed. Vehicle traffic on Paseo Padre Parkway has been observed traveling above the posted speed limit of 45 MPH. Vehicles unable to find a left-turning gap from the Patterson Ranch Road approach could turn right onto southbound Paseo Padre Parkway. The first opportunity to turn off Paseo Padre Parkway is at Kaiser Drive, a half mile to the south.

Near-Term Base Plus Project Conditions

Future year vehicle traffic forecasts were derived from traffic forecasts reflecting the City of Fremont's General Plan build-out (2035).⁵⁴ The General Plan Traffic Impact Analysis's nearest direct traffic forecasts were for the Paseo Padre Parkway/Ardenwood Boulevard intersection. The traffic at the Project study intersection was forecast using the arriving and departing traffic volumes along Paseo Padre Parkway and continuing these trips through the Patterson Ranch Road/Commerce Drive intersection.

Near-Term Base traffic forecasts were modeled by interpolation between the traffic count year (2017) and the build-out (2035) and applying eight years' growth to estimate year 2025 conditions (Figure 4). The Near-Term conditions are assumed to reflect the following projects in the Project area that are either under construction or already entitled:

- Four office buildings on Campus Court entitled through the Ardenwood Technology Park Planned District Amendment
- 500 single-family residential lots and associated parks, trails, streets and utilities under construction on the Patterson Ranch Planned District Project site
- The planned District Amendment for the Dumbarton Quarry Regional Recreation Area

The Near-Term plus Project conditions added the Proposed Project traffic to the Near-Term Base forecasts. The Near-Term and Near-Term plus Project level of service are summarized in **Table 4.3-5**.

⁵⁴ <https://www.fremont.gov/DocumentCenter/View/5813/Appendix-B-web-version?bidId>; Appendix C.

TABLE 4.3-5 NEAR-TERM BASE AND PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

Scenario and Approach	Control	AM Peak Hour		PM Peak Hour	
		LOS	Delay	LOS	Delay
Near-Term Base					
Westbound Commerce Drive	Stop	D	29.0	F	56.7
Eastbound Patterson Ranch Road	Stop	F	57.7	E	41.2
Near-Term plus Project					
Westbound Commerce Drive	Stop	D	31.3	F	57.3
Eastbound Patterson Ranch Road	Stop	F	64.6	E	42.1

Under Near-Term Base conditions and Near-Term plus Project conditions, Commerce Drive and Patterson Ranch Road are forecast to operate at LOS E or F during the commute peak hours due to increased through-traffic on Paseo Padre Parkway. With the Proposed Project, the forecast delay at the Patterson Ranch Road approach would increase by up to seven seconds between Near-Term Base and plus Project conditions.

Cumulative Base Plus Project Conditions

For the Proposed Project, Cumulative Base traffic forecasts for Paseo Padre Parkway were derived from adjacent forecasts at the Paseo Padre Parkway/Ardenwood Boulevard intersection.⁵⁵ The Cumulative Base plus Project conditions added the Proposed Project traffic to the Cumulative Base conditions. The Cumulative Base and Cumulative plus Project level of service for the study intersection are summarized in **Table 4.3-6**.

TABLE 4.3-6 CUMULATIVE BASE AND PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

Scenario and Approach	Control	A.M. Peak Hour		P.M. Peak Hour	
		LOS	Delay	LOS	Delay
Cumulative					
Westbound Commerce Drive	Stop	F	54.7	F	101.5
Eastbound Patterson Ranch Road	Stop	F	124.3	F	97.3
Cumulative plus Project					
Westbound Commerce Drive	Stop	F	61.0	F	102.9
Eastbound Patterson Ranch Road	Stop	F	149.7	F	105.3

Under Cumulative Base and Cumulative plus Project conditions, Commerce Drive and Patterson Ranch Road are forecast to operate at LOS F during both the morning and afternoon commute peak hours. The delay is due to increased vehicle through-traffic on Paseo Padre Parkway. The forecast delay resulting from the Proposed Project at the Patterson Ranch Road approach would increase by up to 25 seconds between Cumulative Base and plus Project conditions.

It is expected that the existing Ohlone overflow parking area near the current Kiosk would seldom be used with construction of the new parking facilities. It is currently used mainly during the

⁵⁵ W-Trans (2016) *Traffic Impact Study for Ardenwood Technology Park*. Figure 11 – Cumulative plus Project Traffic Volumes.

gathering of the Ohlone Peoples and other special event days such as the annual Bird and Butterfly Festival and on Easter Sunday, weather and ground conditions permitting.

With recent construction of the Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway, adjacent to the Park, along with proposed entry modifications and the provision of new internal trails and trail connections, it is likely that the number of visitors entering Coyote Hills Regional Park would be dispersed, with many more visitors arriving by foot or bicycle. These visitors would have the opportunity to explore the 4.5 miles of new and re-constructed trails that are located much closer to the entry area than the existing trail network located nearer to the Visitor Center.

Impact of the Proposed Project on LOS

The Patterson Ranch and Commerce Drive approaches at the study intersection are estimated to operate at a deficient LOS, beginning under Existing conditions (LOS “E”), and getting progressively worse with vehicle traffic growth through year 2035 (LOS “F”). Although the delays forecast under Cumulative plus Project conditions at Patterson Ranch Road appear to be extreme, they affect a relatively small number of vehicles (approximately 30 in the peak hour) compared to the through-traffic on Paseo Padre Parkway (approximately 1,500 in the peak hour). Under Cumulative plus Project conditions, the Project would account for less than one percent of AM peak hour traffic growth ($0.7\% = 5 / (2060-1329)$) and slightly more than one percent ($1.3\% = 9 / (2521-1816)$) of PM peak hour volume growth, or one percent on average.

The Project would add bicycle and pedestrian traffic to the study intersection. Future peak hour bicycle and pedestrian volumes were not forecast because demand is uncertain during the weekday commute peak hour. The Project impact on bicycle and pedestrian traffic is estimated at the percent vehicle traffic impact, or one percent of the projected growth through General Plan build-out.

The City of Fremont’s LOS standards define acceptable intersection operations at LOS D or better during peak hours at all city-operated signalized intersections. As discussed above, the City of Fremont does not have a significance threshold for unsignalized intersections. For purposes of this analysis, the City’s threshold of Level of Service D for signalized intersections was applied to the unsignalized intersection of Patterson Ranch Road/Commerce Drive/Paseo Padre Parkway. The Project would have a *potentially significant* impact because traffic generated by the Project would add vehicle traffic to an intersection operating below the threshold for acceptable operations.

Impact TRANSP-1: The Proposed Project would result in an increase in traffic delays at the Commerce Drive/Paseo Padre Parkway/Patterson Ranch Road intersection. This effect on Level of Service (LOS) represents a *potentially significant* impact.

Mitigation Measure TRANSP-1: To mitigate excessive vehicle traffic delays at the Patterson Ranch Road approach, the City of Fremont should institute “Right Turn Only” from the Patterson Ranch Road and Commerce Drive approaches during peak commute times. Vehicles would have the opportunity to either turn off Paseo Padre Parkway or make a U-turn at adjacent intersections with Ardenwood Boulevard or Kaiser Drive. Traffic signs, striping, and raised curbs may be needed to reinforce the right-turn only requirement. The Park District shall contribute its fair share (one percent) toward the cost of the improvements.

Significance after Mitigation: Contribution of the Proposed Project’s fair share (one percent) of the “Right Turn Only” improvement would improve traffic delays at the Patterson Ranch Road approach to Level of Service C in the AM peak period, and

Level of Service B in the PM peak period. This would reduce the Project's impact to a *less than significant* level.

Impact TRANSP-2: The Proposed Project would increase use of the pedestrian and bicyclist crosswalk at Paseo Padre Parkway, which is not signalized. This represents a *potentially significant* impact.

Mitigation Measure TRANSP-2: The Proposed Project shall contribute a fair share (one percent) of the cost of future intersection modifications to improve pedestrian and bicycle access across Paseo Padre Parkway, at or before the time the City of Fremont implements intersection modifications. These intersection improvements may consist of:

- Narrow the lanes on Paso Padre Parkway from 12 feet to 11 feet.
- Stripe a horizontal buffer between the right-most vehicle lane on northbound and southbound Paso Padre Parkway to provide greater separation between bicyclists and vehicles.
- Shorten the northbound right turn weaving area to slow vehicles before the weaving maneuver and adding green pavement markings to indicate the weaving zone.
- Install additional warning signs in advance and at the bicycle-vehicle weaving area and the pedestrian crosswalks.
- Upgrade the crosswalks from transverse markings (two white lines) to continental markings.
- Add yield lines 30 feet in advance of the crosswalks.
- Install a pedestrian hybrid beacon in both directions of Paseo Padre Parkway.
- The pedestrian hybrid beacon may be installed to allow upgrading to a full traffic signal in the future.

Significance after Mitigation: Contribution of the Proposed Project's fair share (one percent) of the pedestrian and bicycle improvements above would reduce the Project's impact to a *less than significant* level.

Signal Warrant Analysis

The California Manual on Uniform Traffic Control Devices (CA MUTCD) provides guidance on when conditions justify traffic signals. These studies, or "signal warrants", consider the "traffic conditions, pedestrian characteristics, and physical characteristics of the location... to determine whether installation of a traffic control signal is justified at a particular location" (§4C.01).

An analysis for applicable traffic signal warrants and pedestrian beacon warrant for the Proposed Project found that none of the applicable traffic control signal warrants (1, 2, 3, and 4) were met, meaning traffic control signals are not warranted at the Commerce Drive/Paseo Padre Parkway/Patterson Ranch Road intersection. However, the pedestrian hybrid beacon warrant in the CA MUTCD was met using counts observed from Saturday, June 24, 2017. Thus, a pedestrian hybrid beacon may be warranted at this intersection (see Mitigation Measure TRANSP-2, above), and if considered, should conform to all standards and guidance provided in Chapter 4F of the CA MUTCD.

Project Impacts Based on Vehicle Miles Traveled

California Senate Bill 743 changed the State's criteria on transportation-related environmental impacts from a Level-of-Service basis to Vehicle Miles Traveled (VMT). Regulations implementing this change, including changes to the CEQA Guidelines pertaining to evaluation of transportation impacts, had been proposed but were not yet in effect at the time this EIR was prepared. The discussion of VMT below is presented for informational purposes.

VMT measures the amount of trips and distance people drive to a destination. Typically, development projects that are farther from other, complementary land uses (such as a business park far from housing) and in areas without transit or active transportation infrastructure (bike lanes, sidewalks, etc.) generate more driving than development near complementary land uses with more robust transportation options.

The Governor's Office of Planning and Research (OPR) issued a technical advisory on how to apply VMT analysis.⁵⁶ The technical advisory does not specifically suggest a VMT threshold for parks, with most of the discussion oriented around residential, office and retail projects. The most relevant guidance from the technical advisory is for small projects:

***Screening Threshold for Small Projects** Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact.*

The Proposed Project is estimated to 70 additional daily trips (based on 14 combined AM and PM peak hour trips, and extrapolated by a factor of five), which indicates a less-than-significant transportation impact per the Small Projects Screening Threshold.

The OPR guidance on retail uses is also applicable to the Proposed Project: Parks, like retail uses, typically redistribute recreation trips rather than creating new trips. By adding recreational opportunities into the urban fabric and thereby improving recreational destination proximity, local parks tend to shorten trips and reduce VMT. The Proposed Project would provide and improve upon a connection to a regional multiuse trail, which would allow for non-vehicular access.

For these reasons, the Proposed Project is not likely to cause a significant impact based on VMT.

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.

The Project would provide off-street parking spaces, bicycle and pedestrian facilities, connections to existing trails, and transit-supportive facilities that are consistent with City of Fremont policies and programs. As discussed in Section a, above, implementation of the Project would incrementally increase vehicle traffic that would worsen the Level of Service (LOS) at the intersection of Paseo Padre Parkway Patterson Ranch Road/Commerce Drive.

⁵⁶ State of California, Governor's Office of Planning and Research. (April 2018) "Technical Advisory on Evaluating Transportation Impacts in CEQA." http://opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf

Impact TRANSP-3: Vehicle traffic generated by the Proposed Project could worsen the Level of Service at the intersection of Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive. This represents a *potentially significant* impact.

Mitigation Measure TRANSP-3: Implement Mitigation Measure TRANSP-1.

Significance after Mitigation: With the implementation of Mitigation Measure TRANSP-1, the impact of the Proposed Project on Level of Service at Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive would be reduced to a *less than significant* level.

- 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 impacts to air traffic are anticipated as a result of this Project. There would be *no impact*.

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

Collision data from the California Highway Patrol Statewide Integrated Traffic Records System (SWITRS) from 2007 to 2017 show seven collisions at the Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive intersection over the past 11 years. Five collisions involved multiple vehicles, one collision involved a vehicle and bicyclist, and one involved one vehicle hitting a fixed object. Of the seven total collisions, five collisions were broadside collisions. All five collisions occurred between one vehicle on Paseo Padre Parkway and another attempting to turn onto or cross Paseo Padre Parkway from the minor street approaches. The single-vehicle collision was attributed to improper turning resulting in hitting a fixed object.

The bicycle collision occurred when a bicyclist crossing Paseo Padre Parkway was hit by a southbound vehicle on Paseo Padre Parkway. There are no recorded pedestrian collisions at the Patterson Ranch Road/Commerce Drive/Paseo Padre Parkway intersection.

Since Coyote Hills Regional Park first opened nearly 50 years ago, the City of Fremont has redesigned Paseo Padre Road to a high-speed parkway with an unsignalized intersection at the park entry. Vehicle speeds and higher traffic volume from the buildout of the City over the past 50 years have affected safety of access to the Park. Growth in the City, especially office uses on the opposite side of Paseo Padre Parkway from the Park, has substantially increased use of this intersection crossing by pedestrians and bicyclists accessing the Park. Implementation of the Project would not create any transportation hazards due to a design feature. However, the Project would add vehicle, bicycle, and pedestrian traffic to an intersection with existing deficiencies that affect transportation safety.

Impact TRANSP-4: Bicycle and pedestrian traffic generated by the Proposed Project could increase transportation hazards at the intersection of Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive. This represents a *potentially significant* impact.

Mitigation Measure TRANSP-4: Implement Mitigation Measure TRANSP-2.

Significance after Mitigation: With the implementation of Mitigation Measure TRANSP-2, the impact of the Proposed Project on transportation hazards would be reduced to a *less than significant* level.

e. Result in inadequate emergency access.

No substantial impacts to emergency access are anticipated. The Project would not create new barriers to emergency vehicles. The Project would provide additional site access with new bicycle and pedestrian facilities that can be utilized by emergency vehicles. Emergency access on existing streets within and adjacent to the site would not be affected. There would be *no impact*.

f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

The Project would provide additional bicycle and pedestrian facilities, connections to existing trails, and would implement a portion of the Fremont *All Ages and Abilities Vision Network* identified in the General Plan and Fremont Bicycle Plan. However, additional bicycle and pedestrian traffic generated by the Proposed Project could adversely affect safety of the bicycle and pedestrian crossing of Paseo Padre Parkway.

Impact TRANSP-5: Bicycle and pedestrian traffic generated by the Proposed Project could worsen the bicycle and pedestrian safety at the intersection of Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive. This represents a *potentially significant* impact.

Mitigation Measure TRANSP-5: Implement Mitigation Measure TRANSP-2.

Significance after Mitigation: With the implementation of Mitigation Measure TRANSP-2, the impact of the Proposed Project on bicycle and pedestrian safety at Paseo Padre Parkway/Patterson Ranch Road/Commerce Drive would be reduced to a *less than significant* level.

Cumulative Analysis

The following projects in the vicinity of the Proposed Project site were proposed, approved, or under construction at the time this EIR was prepared.

Proposed Projects

Four office buildings on Campus Court. These buildings were entitled through the Ardenwood Technology Park Planned District Amendment.⁵⁷ They would have a total of 809,236.5 square feet, with corporate/professional, administrative, research and development offices, and a full-service hotel. Ancillary uses could include small-scale retail and services uses including restaurants, delis, dry cleaners, health clubs, banks and small retail establishments.

Approved Projects

Coyote Hills Regional Park Visitor Center. As part of the Coyote Hills Regional Park Land Use Plan, a new and larger Visitor Center was approved in 2005 but has not yet been constructed. This Visitor Center will be located in the existing Regional Park, located adjacent to the Project site to the west. The Visitor Center structure would have a maximum of 8,700 square feet, and the Project will include expanded parking in front of the existing Visitor Center (up to 51 additional spaces for a maximum of 120 paved spaces, including existing gravel spaces), enlarged turnaround, a security residence attached to or behind the Visitor Center, rehabilitation of adjacent Hoot Hollow with new shade trees and facilities for five picnic sites, and removal of exotic trees (acacia) to restore open

⁵⁷ Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Chris Barton, Environmental Programs Manager, East Bay Regional Park District, 9 May 2018.

views of the nearby marsh. Planning and conceptual design for the new Visitor Center are currently underway.

Alameda County Flood Control and Water Conservation District's Flood Control Zone 5 Line P Phase 2 Project. Phase 2 of the Zone 5 Line P Project is located downstream of the southern portion of the Project site. This is a separate project and is not addressed in this CEQA document. Phase 2 involves channel improvements along Line P downstream or west of the Project area, through the existing Coyote Hills Regional Park to its outlet at the tidegate discharge culverts in the Alameda Creek levee north of the Visitor Center. A new vehicular bridge is proposed to replace the existing culverts where Patterson Ranch Road crosses Line P.

The habitat enhancement and wetlands mitigation components of the ACFCWCD Phase 1 project (the work south of Ardenwood Creek/Line P) had not been completed at the time this EIR was prepared. This work involves grading two, 2- to 3-foot-deep off-channel basins that will be connected to Ardenwood Creek. The two basins will occupy about 30 acres, and will serve as temporary floodwater detention structures during periods of high flow in Ardenwood Creek. Some of the graded earth will be relocated to create oak savanna uplands with a riparian planting zone along Ardenwood Creek, and to create elevated areas for flood control/maintenance roads. Some of the excess cut not used on site may be off-hauled to an approved disposal location. This mitigation area will be operated and managed by the ACFCWCD over an initial 7- to 10-year period, after which the area would be turned over to the Park District for integration into Coyote Hills Regional Park. The site will serve as a mitigation bank for other maintenance projects.

Under Construction Projects

Patterson Ranch Planned District. This project was approved in 2011 for a 428-acre area that includes the Proposed Project site. On a 101-acre portion of the Patterson Ranch Planned District Project site, located northeast of Ardenwood Boulevard and the Proposed Project site, 500 single-family residential lots and associated parks, trails, streets and utilities are under final phases of construction.

Dumbarton Quarry Regional Recreation Area, Planned District Amendment. This project involves development of the former Dumbarton rock quarry, located south of the Project site, into a 91-acre regional park facility including formal picnic areas, children's playground and play areas, trails, park furniture, parking lots, restroom facilities, turf meadows, overnight camping facilities with a small store, laundry and shower facilities, a 13,000 square foot event center and 150 person outdoor amphitheater with outdoor camp fire pit, and a 1/2-acre corporation and maintenance yard. This project is under construction, and is expected to open in late 2019.

Other Planned Projects That Will Not Be Constructed in the Foreseeable Future

As part of the Patterson Ranch Planned District approved in 2011, a 10-acre site on the west side of Ardenwood Boulevard and immediately adjacent to the Proposed Project site was reserved for a city park and a school for up to 1,100 K-6 students. At the time this EIR was prepared, the City of Fremont, Fremont Unified School District, and the Park District were in discussions about the location of the school and a possible land exchange, and it was considered unlikely that the school would be built for another eight to ten years. In addition, the City of Fremont was planning to retain the City park land but had no plans to build a park at this time.⁵⁸ Therefore, these projects are not listed above as Proposed, Approved, or Under Construction.

⁵⁸ Kristie R. Wheeler, Planning Manager, City of Fremont, Community Development Department, email to Michael Kent, Michael Kent & Associates, 26 July 2018.

Cumulative Impacts of the Proposed Project

As discussed under Near-Term Base Plus Project Conditions and Cumulative Base Plus Project Conditions, above, the transportation report included future year vehicle traffic forecasts reflecting the City of Fremont's General Plan build-out (2035). The transportation report's forecasting methodology differs from the cumulative projects list-based approach above; however, the transportation report's forecasting methodology is consistent with, and includes, the cumulative projects listed above.

Under Cumulative Base and Cumulative plus Project conditions, Commerce Drive and Patterson Ranch Road are forecast to operate at LOS F during both the morning and afternoon commute peak hours. The delay is due to increased vehicle through-traffic on Paseo Padre Parkway. Growth in vehicle traffic due to past, current and probable future projects in the Project vicinity would result in a *potentially significant* cumulative impact. The forecast delay resulting from the Proposed Project at the Patterson Ranch Road approach would increase by up to 25 seconds between Cumulative Base and plus Project conditions. With implementation of Mitigation Measures TRANSP-1 and TRANSP -2, above, the Proposed Project would not make a cumulatively considerable contribution to transportation and traffic. Therefore, the cumulative impact of the Proposed Project on transportation would be *less than significant*.

5 ALTERNATIVES

According to the CEQA Guidelines Section 15126.6:

An EIR shall describe a range of reasonable alternatives to the project, or the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation.

A No Project Alternative is required as one of the “reasonable range of alternatives” that could feasibly attain most or all of the Project’s objectives. Besides the No Project Alternative, three other alternatives, called the: 1) Restore Contractors Residence in Place Alternative, 2) Relocate and Restore Contractors Residence Alternative, and 3) Hand Disassemble, Relocate, and Restore Contractors Residence Alternative are analyzed. Each alternative is analyzed against the Project Objectives presented and significance thresholds considered in Chapter 4 and the impacts compared to those of the Proposed Project.

The Project Objectives (Chapter 3) include:

- Ensuring integration of the Expansion area with the existing Regional Park facilities, uses and resources, as well as the resources of the greater Coyote Hills area.
- Protecting and/or enhancing cultural resources, including providing compatible recreational and interpretive opportunities.
- Protecting and/or enhancing biological resources, while providing recreation, educational and interpretive opportunities.
- Providing for public safety, cultural and biological resource preservation at Coyote Hills through the removal of the deteriorated Contractors residence which has become an attractive nuisance and fire and public safety hazard, and encroaches into sensitive cultural and biological resource areas.
- Removing the Contractors residence in a way that balances cultural and biological resources protection with a wise use of public resources and in a timely manner.
- Protecting and managing surface water and groundwater resources within the Park Expansion area, in cooperation with local agencies.
- Providing opportunities for urban agriculture.
- Providing opportunities for a variety of outdoor recreation activities, including hiking and bicycling, wildlife viewing, picnicking and environmental education.
- Developing and managing the Expansion area to be adaptable and sustainable, with awareness of a changing climate that may affect habitat and public access.
- Designing improvements for low maintenance, high durability and to reduce park operating cost, where feasible.
- Providing opportunities for Climate Smart education as well as scientific research and demonstration through pilot Project programs.

Table 5-1 shows how the Proposed Project and the alternatives are in accordance, or not, with the Project objectives. Comparative impacts for the No Project Alternative, Restore Contractors

Residence in Place Alternative, Relocate and Restore Contractors Residence Alternative, and Hand Disassemble, Relocate, and Restore Contractors Residence Alternative are summarized in **Table 5-2**.

The environmentally superior alternative is then identified. At the conclusion of this chapter, there is an account of alternatives considered earlier in the planning process but rejected because they were infeasible, failed to achieve most of the Project objectives, or did not reduce the Proposed Project's significant impacts.

TABLE 5-1 COMPARISON OF ALTERNATIVES TO PROJECT OBJECTIVES

#	Objective	Proposed Project	No Project Alternative	Restore Contractors Residence in Place Alternative	Relocate and Restore Contractors Residence Alternative	Hand Disassemble, Relocate, and Restore Contractors Residence Alternative
1	Integration of Expansion Area with existing Regional Park facilities, uses and resources, and resources of the greater Coyote Hills area.	Yes	No	Yes	Yes	Yes
2	Protecting and/or enhancing cultural resources, including providing recreational and interpretive opportunities.	Yes	No	No	No	Yes
3	Protecting and/or enhancing biological resources while providing recreational, and interpretive opportunities.	Yes	No	Yes	Yes	Yes
4	Provide for public safety, cultural and biological resource preservation at Coyote Hills through the removal of the deteriorated Contractors residence which has become an attractive nuisance and fire and public safety hazard, and encroaches into sensitive cultural and biological resources.	Yes	No	No	Yes	Yes
5	Remove the contractors residence in a way that balances cultural and biological resources protection with a wise use of public resources and in a timely manner.	Yes	No	No	No	No
6	Protecting and managing surface water and groundwater resources within the Park Expansion area, in cooperation with local agencies.	Yes	No	Yes	Yes	Yes
7	Providing opportunities for urban agriculture.	Yes	Yes	Yes	Yes	Yes

#	Objective	Proposed Project	No Project Alternative	Restore Contractors Residence in Place Alternative	Relocate and Restore Contractors Residence Alternative	Hand Disassemble, Relocate, and Restore Contractors Residence Alternative
8	Providing opportunities for a variety of outdoor recreation activities, including hiking and bicycling, wildlife viewing, picnicking and environmental education.	Yes	No	Yes	Yes	Yes
9	Developing and managing the Expansion Area to be adaptable, with awareness of a changing climate that may affect area resources.	Yes	No	Yes	Yes	Yes
10	Design improvements for low maintenance, high durability and to reduce park operating cost, where feasible.	Yes	No	No	No	No
11	Providing opportunities for Climate Smart education as well as scientific research and demonstration through pilot Project programs.	Yes	No	Yes	Yes	Yes

Source: Questa Engineering, 2018.

TABLE 5-2 IMPACTS OF PROJECT ALTERNATIVES COMPARED TO PROPOSED PROJECT

	Proposed Project – Maximum Impact	No Project Alternative – Impact Comparison	Restore Contractors Residence in Place Alternative – Impact Comparison	Relocate and Restore Contractors Residence Alternative – Impact Comparison	Hand Disassemble, Relocate, and Restore Contractors Residence Alternative – Impact Comparison
Aesthetics	LTS	–	=	–	–
Agriculture and Forest Resources	LTS	+	=	=	=
Air Quality	LTS with Mitigation	+	–	–	–
Biological Resources	LTS with Mitigation	–	–	–	=
Cultural Resources (historic architectural)	Significant and Unavoidable	+	+	+	+
Cultural Resources (Native American archaeological)	LTS with Mitigation	+	-	-	=
Geology and Soils	LTS with Mitigation	+	–	–	–
Greenhouse Gas Emissions	LTS	+	–	–	–
Hazards and Hazardous Materials	LTS with Mitigation	+	–	–	–
Hydrology and Water Quality	LTS with Mitigation	+	–	–	–
Land Use and Planning	LTS	–	=	=	+
Mineral Resources	LTS	+	=	=	=
Noise	LTS with Mitigation	+	–	–	–
Population and Housing	LTS	+	=	=	=
Public Services	LTS	+	=	=	=
Recreation	LTS	=	=	=	=
Transportation/ Traffic	LTS	+	=	=	=
Tribal Cultural Resources	LTS with Mitigation	+	–	–	=
Utilities and Service Systems	LTS with Mitigation	+	=	=	=

LTS = Less than significant
 SU = Significant and Unavoidable
 – impact increased, or less beneficial, compared to Proposed Project/deterioration
 + impact decreased compared to Proposed Project/improvement
 = equivalent impact compared to Proposed Project
 Source: Questa Engineering, 2109.

5.1 *No Project Alternative*

Principal Characteristics

Under the No Project Alternative, the site would remain in its existing condition. There would be no visitor serving facilities or trails constructed that would allow public access and use of the site. No habitat restoration, enhancement, and wildlife management, or vegetation and pest management would occur. The existing archaeological resources and human remains on the site would not be disturbed. The existing historic structures on the site, the Milk House and Contractors Residence, would remain in their current condition, and would be subject to deterioration as time passes. No utility upgrades and extensions, or climate change and sea level rise adaptation, would occur on the site.

Impact Analysis

Aesthetics

The Project site would look the same as present and there would be no aesthetic change. There would be no habitat or wetland restoration and enhancement, or vegetation and pest management. No trails or wildlife observation platforms would be constructed. Because the Proposed Project would have an overall beneficial aesthetic impact on the site, the No Project Alternative, while having no impacts, would be *worse than the Proposed Project* for Aesthetics.

Agriculture and Forest Resources

The Proposed Project would have little or no impact on agriculture and forest resources. The No Project Alternative would have no effect on agriculture and forest resources. Therefore, the No Project Alternative would have *less* impact than the Proposed Project for Agriculture and Forest Resources.

Air Quality

Without the program of habitat and wetland restoration and new construction of trails and visitor serving facilities, there would be no emissions from construction. In addition, there would be no change in visitors from current levels. By definition, there would be *reduced* air quality impacts compared to the Proposed Project.

Biological Resources

The Proposed Project would restore and enhance the 121-acre Patterson Slough Natural Unit and enhance and expand seasonal wetlands in the 29-acre Western Wetlands natural Unit. In contrast, the No Project Alternative would not create or enhance any habitat.

In the absence of the grading for Project construction, enhanced wetlands, and Patterson Slough restoration that is required for the Proposed Project, there would be no short-term, construction-related impacts to wildlife species, jurisdictional waters, or sensitive communities. However, invasive, non-native plant species would not be removed, the Project site would not be restored with native vegetation, and additional seasonal wetlands would not be created or enhanced. There would not be an increase in wildlife habitat, as would occur under the Proposed Project.

The No Project Alternative would not produce the biological benefits provided by the Proposed Project, as the existing seasonal wetlands would be of smaller size and lower quality for wildlife than the Proposed Project, and would provide less hydrologic function in remediating stormwater runoff. Overall, although the No Project Alternative would not have biological impacts, it would be *less beneficial* than the Proposed Project for Biological Resources.

Cultural Resources

With no site grading, no utility upgrades or extensions, no new visitor serving facilities, and no public access improvements, there would be no potential impacts to the known archaeological cultural resources at the site, or areas of presently unknown and buried resources. The potential impacts on archaeological cultural resources of the Proposed Project would be reduced to a less-than-significant level by mitigation measures identified in this EIR. Although the existing historic structures on the site, the Milk House and Contractors Residence, would remain in their current condition, and would be subject to deterioration as time passes, the Contractors Residence would not be disassembled. Therefore, the impacts of the No Project Alternative would be *less* than the Proposed Project and the No Project Alternative would be *better* for Cultural Resources.

Geology and Soils

The No Project Alternative would not result in construction of visitor serving facilities on a Project site that contains expansive soils and is subject to seismic shaking. With appropriate construction practices, facilities could be built to standards that could withstand the likely strong ground shaking, liquefaction, and other effects of a major earthquake. If the public access facilities were not built, and if the Proposed Project – which would bring additional visitors into this area – did not take place, the risks of injury from such an earthquake and accompanying strong ground shaking would be *reduced*. Therefore, the No Project Alternative would have *less* impact than the Proposed Project for Geology and Soils.

Greenhouse Gas Emissions

Without construction equipment, activity associated with grading and site improvements, and with fewer site visitors, there would be lower greenhouse gas (GHG) emissions for the No Project Alternative. However, to the extent that the Proposed Project improvements encourage use of the Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway for bicycle and pedestrian travel, instead of by automobile, there would be a net reduction in vehicle trips under the Proposed Project, which would benefit air quality. Overall, the No Project Alternative would therefore have *less* potential impact for GHG emissions compared to the Proposed Project and would be *better* than the Proposed Project for GHG emissions.

Hazards and Hazardous Materials

The No Project Alternative would not involve the use of construction equipment and materials, and therefore the risk of accidental spills of fuels, lubricants, etc. would not occur, and impacts associated with construction, and operation, would not take place. Therefore, the No Project Alternative would have *less* potential impact than the Proposed Project for Hazards and Hazardous Materials.

Hydrology and Water Quality

Without the construction of the visitor serving facilities, habitat and wetland enhancement, and public access components, there is less possibility of soil erosion and sedimentation causing turbidity in the Bay, and in this respect, the No Project Alternative would result in reduced short-term impacts compared to the Proposed Project. However, with mitigation measures identified in the Initial Study, these impacts would be reduced to a less-than-significant level. Therefore, the No Project Alternative would have *similar* impacts to the Proposed Project for Hydrology and Water Quality.

Land Use and Planning

No significant land use impacts would result from the Proposed Project from division of an established community or conflicts in land uses. As the No Project would have no effect on established communities or conflicts in land uses, there would be little difference between the Proposed Project and the No Project Alternative.

The No Project Alternative would not improve the Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway, or increase public access to Coyote Hills Regional Park. Therefore, the No Project Alternative would therefore have *greater* impacts than the Proposed Project for Land Use and Planning.

Mineral Resources

The Proposed Project would have little impact on mineral resources, while the No Project Alternative would have no effect on mineral resources. Therefore, the No Project Alternative would have *less* impact than the Proposed Project for Mineral Resources.

Noise

Without the construction phase of the Project, there would be less temporary noise disturbance to the neighbors of the Project site, and visitors to Coyote Hills Regional Park. Ambient noise exposure would remain the same. Compared to the Proposed Project, the No Project Alternative would attract fewer visitors to the area and generate less vehicular noise. The No Project Alternative would have *lesser* impacts and be *better* than the Proposed Project for Noise.

Population and Housing

The Proposed Project would have little impact on population and housing, while the No Project Alternative would have no effect on population and housing. Therefore, the No Project Alternative would have *less* impact than the Proposed Project for Population and Housing.

Public Services

The Proposed Project would slightly increase the demand for police, fire, and emergency medical service, but would not require additional staff or new or altered facilities, and this impact would be less than significant. The No Project Alternative would avoid this slight increase, and thus would have a slightly *less* impact than the Proposed Project on public services.

Recreation

The No Project Alternative would not result in an increase in visitors to Coyote Hills Regional Park and future users of the improved Bay Trail system. However, there would not be public access improvements or expansion of recreational facilities as with the Proposed Project. The Proposed Project would result in less-than-significant impacts to recreational facilities and therefore the No Project Alternative would be *similar* to the Proposed Project with *equivalent* impacts for Recreation.

Transportation/Traffic

The additional pedestrian and bicycle use, and passenger vehicles on local streets as a consequence of the Proposed Project, would contribute negligible additions compared to the existing conditions of local streets at times of maximum park use. Under the No Project Alternative, there would be no change to the existing level of traffic safety concerns at the Project site or emergency access, and there would be no conflicts with transit policies. With the No Project Alternative, there would be fewer park users and fewer vehicle trips to the Project site. Thus, the No Project Alternative would have slightly *less* impact than the Proposed Project in terms of Transportation/Traffic impacts.

Tribal Cultural Resources

Although the potential impacts of the Proposed Project to Tribal Cultural Resources would be reduced to a less than significant level by the mitigation measure identified in this EIR, this Alternative would avoid these impacts, and therefore would have *lesser* impacts than the Proposed Project in terms of Tribal Cultural Resources.

Utilities and Service Systems

The No Project Alternative would not result in the use of water or other utilities. The Proposed Project would use small amounts of irrigation water for restoration planting and the new restroom, and generate small amounts of wastewater from the restroom. The Proposed Project would result in less-than-significant impacts to utilities and service systems. Because the No Project Alternative would have no impact on water and other utilities, its impact on Utilities and Service Systems would be slightly *less* than the Proposed Project.

Comparison to Project Objectives

As summarized in **Table 5-1**, the No Project Alternative would fail to meet all of the Project objectives, including the objectives of integrating the Project site into the existing Regional Park, enhancing wetlands and habitats, and providing opportunities for recreation. There would be no opportunities for Climate Smart education, or improvement of the San Francisco Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway.

5.2 Restore Contractors Residence in Place Alternative

Principal Characteristics

The Restore Contractors Residence in Place Alternative would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Under this alternative, the Contractors Residence would remain in its current location, and be restored in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995). To properly stabilize the Contractors Residence for restoration, the building's foundation would require repair and reconstruction. This would involve mobilization of heavy equipment in the vicinity of the structure in order to lift the building for foundation work. In addition to the foundation repair work, continuous contractor vehicle traffic bringing in labor, equipment and materials would be required over an estimated six to eight month period.

Aesthetics

The Restore Contractors Residence in Place Alternative would look slightly different from the Proposed Project in that it would include a restored Contractors Residence in its present location, rather than disassembling the structure and returning the building site to a more natural appearance. In other respects, the Restore Contractors Residence in Place Alternative would have similar aesthetic impacts as the Proposed Project. Because the restoration of the Contractors Residence in place under the Restore Contractors Residence in Place Alternative would affect only a small portion of the 306-acre Project site, and this difference would be very similar to existing aesthetic conditions, this alternative would have aesthetic impacts *similar* to the Proposed Project.

Agriculture and Forest Resources

Similar to the Proposed Project, the Restore Contractors Residence in Place Alternative would have little or no impact on agriculture and forest resources. Therefore, the Restore Contractors Residence in Place Alternative would have impacts *similar* to the Proposed Project for Agriculture and Forest Resources.

Air Quality

The area graded and disturbed for wetland and habitat enhancement would be the same for the Restore Contractors Residence in Place Alternative as the Proposed Project; however, there would be somewhat more use of heavy construction equipment because of the need for repair and reconstruction of the foundation of the Contractors Residence, as well as subsequent restoration. Air emissions would be greater than the Proposed Project, and the Restore Contractors Residence in Place Alternative would be *worse* for Air Quality.

Biological Resources

The Restore Contractors Residence in Place Alternative would create or enhance seasonal wetlands and upland habitat, but there would be slightly less habitat created under this alternative because the Contractors Residence would not be removed. The Contractors Residence is located in the most sensitive and biologically important part of the Project area, adjacent to Patterson Slough. Furthermore, foundation repair including mobilization of heavy equipment could damage sensitive biological resources in the Patterson Slough Natural Unit near the Contractors Residence. Overall, the Restore Contractors Residence in Place Alternative would be *less beneficial* than the Proposed Project for Biological Resources.

Cultural Resources

The Restore Contractors Residence in Place Alternative would avoid the significant unavoidable impact on historic architectural resources of the Proposed Project. However, to properly stabilize the Contractors house for restoration, the building's foundation would need repair and reconstruction. This would involve mobilization of heavy equipment over the building site and vicinity in order to lift the building for foundation work. In addition to the foundation repair work, continuous contractor vehicle traffic bringing in labor, equipment and materials would be required over an estimated six- to eight-month period. Because of relatively high groundwater conditions in this area and the location of the house on un-compacted and un-controlled local soil fill materials, the soils are expected to be soft and compressible under equipment and traffic loading. Under these conditions, it is expected that there would be considerable damage to the underlying sub-surface archaeological resources, which may include Native American human remains. This would create a significant unavoidable impact on cultural resources. Thus, this alternative would avoid a significant unavoidable adverse impact on historic architectural resources, but create a significant unavoidable impact on archaeological resources including Native American human remains. Therefore, the Restore Contractors Residence in Place Alternative and the Proposed Project would both have significant unavoidable impacts on cultural resources, and in this sense would be equivalent for Cultural Resources.

Geology and Soils

Like the Proposed Project, the Restore Contractors Residence in Place Alternative would include wetland and habitat restoration and enhancement, and visitor serving facilities and trail construction. There would be more excavation associated with repair of the Contractors Residence foundation under this alternative, with increased risk of erosion. Therefore, impacts would be *greater*, and the Restore Contractors Residence in Place Alternative would be *worse* to the Proposed Project for Geology and Soils.

Greenhouse Gas Emissions

Operation of the Restore Contractors Residence in Place Alternative would generate greenhouse gas emissions similar to the Proposed Project. The use of heavy construction equipment for restoration of the Contractors Residence would be higher for the Restore Contractors Residence in Place Alternative as compared to the Proposed Project, in which the building would be disassembled with hand equipment. Impacts of construction would be *greater* than the Proposed Project, and the Restore Contractors Residence in Place Alternative would be *worse* for GHG emissions.

Hazards and Hazardous Materials

Under the Restore Contractors Residence in Place Alternative, there would be some increased risk of accidental spills of heavy equipment diesel and hydraulic fluids associated with greater use of heavy equipment for repair and restoration of the Contractors Residence and its foundation. Overall, the risks are considered greater for the Restore Contractors Residence in Place Alternative than the Proposed Project, and impacts would be *worse* for Hazards and Hazardous Materials.

Hydrology and Water Quality

The Restore Contractors Residence in Place Alternative would involve more heavy equipment use and excavation for repair and reconstruction of the foundation of the Contractors Residence. The Restore Contractors Residence in Place Alternative would consequently have more risk of erosion. Therefore, the Restore Contractors Residence in Place Alternative would be *worse* than the Proposed Project for hydrology and water quality impacts.

Land Use and Planning

Overall, impacts from the Restore Contractors Residence in Place Alternative on established communities and conflicts in land uses would be similar to those of the Proposed Project. The Restore Contractors Residence in Place Alternative would have less conflict with plans and policies that call for preservation of historic buildings; however, it would have more conflict with plans and policies that call for preservation of archaeological resources. In this sense the Restore Contractors Residence in Place Alternative would be *equivalent* to the Proposed Project for Land Use and Planning.

Mineral Resources

Similar to the Proposed Project, the Restore Contractors Residence in Place Alternative would have little impact on mineral resources. Therefore, the Restore Contractors Residence in Place Alternative would have impacts *similar* to the Proposed Project for Mineral Resources.

Noise

Noise impacts during the construction phases of the Restore Contractors Residence in Place Alternative would be greater than the Proposed Project, as there would be more heavy equipment use during restoration of the Contractors Residence and its foundation. Compared to the Proposed Project, the Restore Contractors Residence in Place Alternative would have a similar number of Park visitors who would be exposed to existing ambient noise conditions. Overall, the Restore Contractors Residence in Place Alternative would have greater noise impacts and be *worse* than the Proposed Project.

Population and Housing

Similar to the Proposed Project, the Restore Contractors Residence in Place Alternative would have little impact on population and housing. Therefore, the Restore Contractors Residence in Place Alternative would have impacts *similar* to the Proposed Project for Population and Housing.

Public Services

Both the Proposed Project and the Restore Contractors Residence in Place Alternative would slightly increase the demand for police, fire, and emergency medical service, but would not require additional staff or new or altered facilities, and this impact would be less than significant. The Restore Contractors Residence in Place Alternative would be *equivalent* in impacts on public services to the Proposed Project.

Recreation

The Restore Contractors Residence in Place Alternative would similar area and facilities available for recreation use. Potential impacts would be *equivalent* to the Proposed Project for Recreation.

Transportation/Traffic

Since the public access improvements and recreational facilities constructed for the Restore Contractors Residence in Place Alternative would be similar to the Proposed Project, the number of additional visitors also would be similar, due to similarly increased recreational opportunities. The level of additional bicycles and pedestrians, and automobile traffic that would be generated by the Proposed Project is considered negligible to the existing conditions of the local streets. The effect of this alternative on traffic safety hazards would be the same as the Proposed Project. In addition, similar to the Proposed Project, improvement of the

Bay Trail would have offsetting beneficial impacts by encouraging greater travel by bicycling and walking, including during commute periods. Consequently, the Restore Contractors Residence in Place Alternative would be *equivalent* to the Proposed Project for Transportation/Traffic.

Tribal Cultural Resources

As discussed in Cultural Resources, above, foundation work for building restoration would have significant unavoidable impacts on archaeological resources including Native American human remains. Potential impacts would be *greater than* the Proposed Project for Tribal Cultural Resources.

Utilities and Service Systems

The Restore Contractors Residence in Place Alternative would have similar water use and wastewater generation relative to the Proposed Project; in any case, the impacts of both this alternative and the Proposed Project would be less than significant. Impacts for the Restore Contractors Residence in Place Alternative would be *equivalent to* the Proposed Project for Utilities and Service Systems.

Comparison to Project Objectives

As shown in **Table 5-2**, the Restore Contractors Residence in Place Alternative would meet most of the Project objectives, as does the Proposed Project, but would fail to meet the objective of protecting and/or enhancing cultural (archaeological) resources.

5.3 Relocate and Restore Contractors Residence Alternative

Principal Characteristics

The Relocate and Restore Contractors Residence Alternative would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Under this alternative, the Contractors Residence would be relocated to the Farm Yard Agricultural Unit, to a site that is not underlain by sensitive cultural resources, and restored in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995). Moving the Contractors Residence would require bringing in heavy equipment in order to lift the house onto a house-moving platform truck and trailer.

Impact Analysis

Aesthetics

The Relocate and Restore Contractors Residence Alternative would look slightly different from the Proposed Project in that it would include a restored Contractors Residence in the Farm Yard Agricultural Unit on the Project site, rather than disassembling the structure and returning the original building site to a more natural appearance. The restored Contractors Residence in the Farm Yard Agricultural Unit would block views of the Coyote Hills, an important scenic resource. In other respects, the Relocate and Restore Contractors Residence Alternative would have similar aesthetic impacts as the Proposed Project. Because the restoration of the Contractors Residence in a new location in the Farm Yard Agricultural Unit could adversely affect scenic views, impacts would be *greater* than the Proposed Project, and the Relocate and Restore Contractors Residence Alternative would be *worse* for Aesthetics.

Agriculture and Forest Resources

Similar to the Proposed Project, the Relocate and Restore Contractors Residence Alternative would have little or no impact on agriculture and forest resources. Therefore, the Relocate and Restore Contractors Residence Alternative would have impacts *similar* to the Proposed Project for Agriculture and Forest Resources.

Air Quality

Air emissions during operation, and the area graded and disturbed for wetland and habitat enhancement would be the same for the Relocate and Restore Contractors Residence Alternative as the Proposed Project; however, there would be more use of construction equipment because of the relocation and restoration of the Contractors Residence. Air emissions would be greater to the Proposed Project, and the Relocate and Restore Contractors Residence Alternative would be *worse* for Air Quality.

Biological Resources

The Relocate and Restore Contractors Residence Alternative would create or enhance seasonal wetlands and upland habitat, including the site from which the Contractors Residence would be removed. However, mobilization of the heavy equipment necessary to move the structure would damage sensitive biological resources in the Patterson Slough Natural Unit near of the Contractors Residence. The new location of the Contractors Residence in the Farm Yard Agricultural Unit would have lower biological sensitivity. Overall, the Relocate and Restore Contractors Residence Alternative would be *less beneficial* than the Proposed Project for Biological Resources.

Cultural Resources

The Relocate and Restore Contractors Residence Alternative would avoid the significant unavoidable impact of loss of the historic structure; however, the building would lose its integrity of location and setting through relocation. In addition, moving the structure would require bringing in heavy equipment in order to lift the house onto a house-moving platform truck and trailer. This procedure is expected to cause substantial damage to the underlying sub-surface archaeological resources, which may include Native American human remains. This would create a significant unavoidable impact on cultural resources. Thus, this alternative would avoid or reduce a significant unavoidable adverse impact on historic architectural resources, but would create a significant unavoidable impact on archaeological resources including Native American human remains. Therefore, the Relocate and Restore Contractors Residence Alternative and the Proposed Project would both have significant unavoidable impacts on cultural resources, and in this sense would be *equivalent* for Cultural Resources.

Geology and Soils

Like the Proposed Project, the Relocate and Restore Contractors Residence Alternative would include wetland and habitat restoration and enhancement, and visitor serving facility and trail construction. There would be more heavy equipment mobilization associated with moving the Contractors Residence under this alternative, with increased risk of erosion. Therefore, impacts would be *greater*, and the Relocate and Restore Contractors Residence Alternative would be *worse* to the Proposed Project for Geology and Soils.

Greenhouse Gas Emissions

Operation of the Relocate and Restore Contractors Residence Alternative would generate greenhouse gas emissions similar to the Proposed Project. The use of heavy equipment for moving and restoration of the Contractors Residence would be higher for the Relocate and Restore Contractors Residence Alternative as compared to the Proposed Project, in which the building would be disassembled with hand equipment. Impacts of construction would be *greater* than the Proposed Project, and the Relocate and Restore Contractors Residence Alternative would be *worse* for GHG emissions.

Hazards and Hazardous Materials

Under the Relocate and Restore Contractors Residence Alternative, there would be some increased risk of accidental spills of heavy equipment diesel and hydraulic fluids associated with greater use of heavy equipment for movement and restoration of the Contractors Residence. Overall, the risks are considered

greater for the Relocate and Restore Contractors Residence Alternative than the Proposed Project, and impacts would be *worse* for Hazards and Hazardous Materials.

Hydrology and Water Quality

Operation of the Relocate and Restore Contractors Residence Alternative would have similar impacts on hydrology as the Proposed Project. The Relocate and Restore Contractors Residence Alternative would involve more heavy equipment use for the movement and, possibly, restoration of the Contractors Residence. The Relocate and Restore Contractors Residence Alternative would consequently have more risk of erosion. Therefore, the Relocate and Restore Contractors Residence Alternative would be *worse* than the Proposed Project for hydrology and water quality impacts.

Land Use and Planning

Impacts from the Relocate and Restore Contractors Residence Alternative on established communities and conflicts in land uses would be similar to those of the Proposed Project. The Relocate and Restore Contractors Residence Alternative would have less conflict with plans and policies that call for preservation of historic buildings, but more conflict with plans and policies that call for preservation of archaeological resources. Overall, the impact of this alternative would be similar and *equivalent* to the Proposed Project for Land Use and Planning.

Mineral Resources

Similar to the Proposed Project, the Relocate and Restore Contractors Residence Alternative would have little impact on mineral resources. Therefore, the Relocate and Restore Contractors Residence Alternative would have impacts *similar* to the Proposed Project for Mineral Resources.

Noise

Noise impacts during the construction phases of the Relocate and Restore Contractors Residence Alternative would be greater than the Proposed Project, as there would be more heavy equipment use during movement and restoration of the Contractors Residence. Compared to the Proposed Project, the Relocate and Restore Contractors Residence Alternative would have a similar number of Park visitors who would be exposed to existing ambient noise conditions. Overall, the Relocate and Restore Contractors Residence Alternative would have greater noise impacts and be *worse* than the Proposed Project.

Population and Housing

Similar to the Proposed Project, the Relocate and Restore Contractors Residence Alternative would have little impact on population and housing. Therefore, the Relocate and Restore Contractors Residence Alternative would have impacts *similar* to the Proposed Project for Population and Housing.

Public Services

Both the Proposed Project and the Relocate and Restore Contractors Residence Alternative would slightly increase the demand for police, fire, and emergency medical service, but would not require additional staff or new or altered facilities, and this impact would be less than significant. The Relocate and Restore Contractors Residence Alternative would be *equivalent* in impacts on public services to the Proposed Project.

Recreation

The Relocate and Restore Contractors Residence Alternative would provide similar facilities and area for recreation use. Potential impacts would be *equivalent* to the Proposed Project for Recreation.

Transportation/Traffic

Since the public access improvements and recreational facilities constructed for the Relocate and Restore Contractors Residence Alternative would be similar to the Proposed Project, the number of additional visitors

also would be similar, due to similarly increased recreational opportunities. The level of additional bicycles and pedestrians, and automobile traffic that would be generated by the Proposed Project is considered negligible to the existing conditions of the local streets. The effect of this alternative on traffic safety hazards would be the same as the Proposed Project. In addition, similar to the Proposed Project, improvement of the Bay Trail would have offsetting beneficial impacts by encouraging greater travel by bicycling and walking, including during commute periods. Consequently, the Relocate and Restore Contractors Residence Alternative would be *equivalent* to the Proposed Project for Transportation/Traffic.

Tribal Cultural Resources

As discussed in Cultural Resources, above, mobilization of heavy equipment for moving the Contractors Residence would have significant unavoidable impacts on archaeological resources including Native American human remains. Potential impacts would be *greater* than the Proposed Project for Tribal Cultural Resources.

Utilities and Service Systems

The Relocate and Restore Contractors Residence Alternative would have similar water use and wastewater generation relative to the Proposed Project; in any case, the impacts of both this alternative and the Proposed Project would be less than significant. Impacts for the Relocate and Restore Contractors Residence Alternative would be *equivalent* to the Proposed Project for Utilities and Service Systems.

Comparison to Project Objectives

As shown in **Table 5-1**, the Relocate and Restore Contractors Residence Alternative would meet most of the Project objectives, as does the Proposed Project, but would fail to meet the objective of protecting and/or enhancing cultural (archaeological) resources.

5.4 Hand Disassemble, Relocate, and Restore Contractors Residence Alternative

Principal Characteristics

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be the same as the Proposed Project in all respects except for the treatment of the historic Contractors Residence on the site. Like the Proposed Project, this alternative would involve dismantling of the Contractors Residence with hand tools. Unlike the Proposed Project, the Contractors Residence would be relocated at a site in the Farm Yard Agricultural Unit that is not underlain by sensitive cultural resources, and restored in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995). Compared to the other alternatives discussed above, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would involve more work done by hand.

Impact Analysis

Aesthetics

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would look slightly different from the Proposed Project in that it would include a restored Contractors Residence in the Farm Yard Agricultural Unit on the Project site, rather than removing the structure and returning the building site to a more natural appearance. The restored Contractors Residence in the Farm Yard Agricultural Unit would block views of the Coyote Hills, an important scenic resource. In other respects, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have similar aesthetic impacts as the Proposed Project. Because the restoration of the Contractors Residence in a new location in the Farm Yard Agricultural Unit could adversely affect scenic views, impacts would be *greater* than the Proposed Project, and

the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *worse* for Aesthetics.

Agriculture and Forest Resources

Similar to the Proposed Project, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have little or no impact on agriculture and forest resources. Therefore, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have impacts *similar* to the Proposed Project for Agriculture and Forest Resources.

Air Quality

Air emissions during operation, and the area graded and disturbed for wetland and habitat enhancement would be the same for the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative as the Proposed Project; however, there would be more use of construction equipment because of the dismantling, relocation, and restoration of the Contractors Residence. Air emissions would be greater to the Proposed Project, and the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *worse* for Air Quality.

Biological Resources

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would create or enhance seasonal wetlands and upland habitat, including the site from which the Contractors Residence would be removed. Like the Proposed Project, disassembly of the Contractors Residence with hand tools would avoid damage to sensitive biological resources in the Patterson Slough Natural Unit near the Contractors Residence. The new location of the Contractors Residence in the Farm Yard Agricultural Unit would have lower biological sensitivity. Overall, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *equivalent* to the Proposed Project for Biological Resources.

Cultural Resources

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would avoid the significant unavoidable impact of loss of the historic structure; however, the building would lose its integrity of location and setting through relocation. Disassembly with hand tools would avoid damage to the underlying sub-surface archaeological resources, which may include Native American human remains. Thus, this alternative would avoid the significant unavoidable adverse impact of loss of historic architectural resources, but would result in loss of the building's integrity of location and setting. Because this alternative, like the Proposed Project, would avoid impacts on archaeological resources, and would have a smaller impact on historic architectural resources than the Proposed Project, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have *lesser* impacts on Cultural Resources.

Geology and Soils

Like the Proposed Project, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would include wetland and habitat restoration and enhancement, and visitor serving facility and trail construction. There would be more heavy equipment mobilization associated with restoring the Contractors Residence under this alternative, with increased risk of erosion. Therefore, impacts would be *greater*, and the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *worse* than the Proposed Project for Geology and Soils.

Greenhouse Gas Emissions

Operation of the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would generate greenhouse gas emissions similar to the Proposed Project. The use of construction equipment for restoration of the Contractors Residence would be higher for the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative as compared to the Proposed Project. Impacts of construction would be

greater than the Proposed Project, and the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *worse* for GHG emissions.

Hazards and Hazardous Materials

Under the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative, there would be some increased risk of accidental spills of heavy equipment diesel and hydraulic fluids associated with greater use of construction equipment for restoration of the Contractors Residence. Overall, the risks are considered greater for the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative than the Proposed Project, and impacts would be *worse* for Hazards and Hazardous Materials.

Hydrology and Water Quality

Operation of the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have similar impacts on hydrology as the Proposed Project. The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative may involve more heavy equipment use for the restoration of the Contractors Residence. This Alternative would consequently have more risk of erosion. Therefore, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *worse* than the Proposed Project for hydrology and water quality impacts.

Land Use and Planning

Impacts from the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative on established communities and conflicts in land uses would be similar to those of the Proposed Project. This Alternative would have somewhat less conflict with plans and policies that call for preservation of historic buildings, and would not conflict with plans and policies that call for preservation of archaeological resources. Overall, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *better* than the Proposed Project for Land Use and Planning.

Mineral Resources

Similar to the Proposed Project, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have little impact on mineral resources. Therefore, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have impacts *similar* to the Proposed Project for Mineral Resources.

Noise

Noise impacts during the construction phases of the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be greater than the Proposed Project, as there would be more construction equipment use during restoration of the Contractors Residence. Compared to the Proposed Project, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have a similar number of Park visitors who would be exposed to existing ambient noise conditions. Overall, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have *greater* noise impacts and be *worse* than the Proposed Project.

Population and Housing

Similar to the Proposed Project, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have little impact on population and housing. Therefore, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have impacts *similar* to the Proposed Project for Population and Housing.

Public Services

Both the Proposed Project and the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would slightly increase the demand for police, fire, and emergency medical service, but would not

require additional staff or new or altered facilities, and this impact would be less than significant. The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *equivalent* in impacts on public services to the Proposed Project.

Recreation

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would provide similar facilities and area for recreation use. Potential impacts would be *equivalent to* the Proposed Project for Recreation.

Transportation/Traffic

Since the public access improvements and recreational facilities constructed for the Hand Disassemble Relocate, and Restore Contractors Residence Alternative would be similar to the Proposed Project, the number of additional visitors also would be similar, due to similarly increased recreational opportunities. The level of additional bicycles and pedestrians, and automobile traffic that would be generated by the Proposed Project is considered negligible to the existing conditions of the local streets. The effect of this alternative on traffic safety hazards would be the same as the Proposed Project. In addition, similar to the Proposed Project, improvement of the Bay Trail would have offsetting beneficial impacts by encouraging greater travel by bicycling and walking, including during commute periods. Consequently, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *equivalent* to the Proposed Project for Transportation/Traffic.

Tribal Cultural Resources

Like the Proposed Project, the Hand Disassemble, Relocate, and Restore Contractors Residence would dismantle the Contractors Residence with hand tools. This would avoid impacts on subsurface archaeological resources in the area, which could include Native American human remains. The Hand Disassemble, Relocate, and Restore Contractors Residence would have similar and *equivalent* impacts to the Proposed Project in terms of Tribal Cultural Resources.

Utilities and Service Systems

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would have similar water use and wastewater generation relative to the Proposed Project; in any case, the impacts of both this alternative and the Proposed Project would be less than significant. Impacts for the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be *equivalent to* the Proposed Project for Utilities and Service Systems.

Comparison to Project Objectives

As shown in **Table 5-1**, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would meet most of the Project objectives, as does the Proposed Project, but would partially fail to meet the objective of protecting and/or enhancing cultural (historic architectural) resources.

5.5 Environmentally Superior Alternative

The Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be the Environmentally Superior Alternative. Although it would have greater environmental impacts than the Proposed Project with respect to some impact categories, mitigation measures could reduce these impacts to a less-than-significant level for both this alternative and the Proposed Project, with the exception of impacts on historic architectural resources, which would be significant and unavoidable under the Proposed Project. In the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative, the historic Contractors Residence would be preserved, albeit in a different location, with consequent loss of integrity of site and

setting. Nevertheless, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would substantially reduce impacts on historic architectural resources, while avoiding significant impacts on archaeological resources and buried human remains. For these reasons, the Hand Disassemble, Relocate, and Restore Contractors Residence Alternative would be the Environmentally Superior Alternative.

5.6 Alternatives Considered But Rejected

Several alternatives for public access and restoration were considered during the planning stages. The following alternatives were considered but rejected.

Preserve Contractors Residence in Place Alternative

The Preserve Contractors Residence in Place Alternative would not fully restore the Contractors Residence, but would prevent further deterioration of the structure, through annual inspections of the building's condition, weathertightness, and vandal resistance. Repairs and maintenance would be conducted as necessary in a timely fashion, and in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995). The intent of this alternative is to maintain the building until such time as it would be fully restored and/or moved from its present location.

This alternative was rejected because, if it eventually results in restoration and/or moving of the Contractors Residence, it would be similar in effect and environmental impacts to the alternatives evaluated above: 1) Restore Contractors Residence in Place Alternative, 2) Relocate and Restore Contractors Residence Alternative, 3) Hand Disassemble, Relocate, and Restore Contractors Residence Alternative. Thus, in the case of eventual restoration, this alternative is not meaningfully different from alternatives evaluated above.

If the Contractors Residence is never restored or moved, this alternative would be less effective at protecting and/or enhancing cultural resources than the alternatives evaluated above. In addition, a structure that is not available for public use would exist permanently on the site. Thus, in the case that restoration never occurs, this alternative would be less effective at protecting cultural resources than the alternatives evaluated above.

For these reasons, the Preserve Contractors Residence in Place Alternative is considered inferior to the alternatives evaluated above. Therefore, the Preserve Contractors Residence in Place Alternative to the Proposed Project is rejected.

Alternative Locations for the Entire Proposed Project

Alternative locations for the Proposed Project were rejected because the Project is specific to the unique conditions of the Project site, which is adjacent to the existing Coyote Hills Regional Park and contains Patterson Slough, a unique but degraded resource that would be restored. In addition, it would be very difficult or impossible to find an undeveloped area of similar size and open space values in the Project vicinity. Alternative locations would fundamentally fail to meet the objectives of the Proposed Project, including integration of the Expansion Area with the existing Regional Park facilities, uses and resources, as well as the resources of the greater Coyote Hills area managed by California Department of Fish and Wildlife, and the US Fish and Wildlife Service. Therefore, an offsite location as an alternative for the Proposed Project is rejected.

Eliminate Patterson Slough Overlook (West-side) Spur Trail and Relocate Parking and Picnic Areas Alternative

An alternative that would relocate the Proposed Project's 100-car parking lot and picnic area from north of Patterson Ranch Road to a site south of Patterson Ranch Road, and eliminate the proposed Patterson Slough West Spur Trail, was considered. In all other respects, this alternative would be the same as the Proposed Project.

The Proposed Project's location north of Patterson Ranch Road for the 100-car parking lot and picnic area consists of low-quality, degraded ruderal habitat that was farmed until recently. The area south of Patterson Ranch Road is the best agricultural land on the Project site, based on soils and available irrigation water supply. Relocating the parking lot and picnic area would avoid development of approximately 1.5 acres of low-quality habitat area north of Patterson Ranch Road, but would eliminate 1.5 acres of quality agricultural land south of the Road. Under the Proposed Project, the area north of Patterson Ranch Road would be restored as Oak savanna, or enhanced grasslands and created seasonal wetlands. Conditions are less suitable for mixed riparian forest restoration for much of this area. As discussed in Chapter 4.1 Biological Resources, all biological impacts of the Proposed Project, including the parking and picnic areas north of Patterson Ranch Road, would be reduced to a less-than-significant level by mitigation measures identified in the EIR. The same mitigation measures applied to this alternative would similarly reduce biological impacts to a less-than significant level. Thus, this alternative would not be better than the Proposed Project in terms of impacts on biological resources. However, unlike the Proposed Project, this alternative would eliminate approximately 1.5 acres of agricultural land. This would conflict with the Proposed Project's objective of "Providing opportunities for urban agriculture" and may potentially conflict with City of Fremont General Plan Goals, and Open Space and Agriculture Easement conditions.

The proposed alignment of the Patterson Slough Overlook (West-side) Spur Trail and Wildlife Observation Platform is located along an existing dirt road to farm labor housing that formerly existed on the Project site. This existing road would remain in place even if the Patterson Slough West Spur Trail is eliminated from the Project and continue to be used for site management, including weed suppression, fire fuels reduction, and mosquito and vector control access. Under the Proposed Project, wildlife-friendly fences and trail signs would protect adjacent existing and proposed restored riparian habitat areas from the Overlook Spur Trail and Wildlife Observation Platform. Only foot traffic would be allowed on this trail, no bicycles would be allowed, and no dogs allowed, even on leash. The proposed Wildlife Observation Platform would be set back a minimum of 100 feet from the edge of the riparian corridor, and also screened with landscape mounds and native landscape plantings. This is greater than the City of Fremont's requirement of a 30-foot development setback from streamcourses, and for which the Park District has voluntarily agreed to meet or exceed the Ordinance requirements. As mentioned above, all biological impacts of the Proposed Project, including the Patterson Slough Overlook (West-side) Spur Trail, would be reduced to a less-than-significant level by mitigation measures identified in the EIR. For these reasons, elimination of the Spur Trail would not substantially reduce the Project's impacts on biological resources.

This alternative would not prevent the significant unavoidable impact of the loss of the historic Contractors Residence on the Project site.

Because the Eliminating the Overlook (West-side) Spur Trail and Relocate Parking and Picnic Areas Alternative would eliminate 1.5 acres of agricultural land, but would not avoid impacts on historic architectural resources or substantially reduce impacts on biological resources, this alternative is rejected.

6 CEQA REQUIRED ASSESSMENT

As required by CEQA, this chapter provides an assessment of the proposed Coyote Hills Restoration and Public Access Project with respect to growth inducement, unavoidable significant impacts, significant irreversible changes, impacts found not to be significant, cumulative impacts, and relationship between short-term and long-term uses of the environment.

6.1 *Growth Inducement*

A project is considered to be growth inducing if it fosters economic or population growth beyond the boundaries of the Project site by, for example, the extension of urban services or transportation infrastructure to an underserved area, or the removal of major barriers to development. Not all growth inducement is necessarily negative. Negative impacts associated with growth inducement occur only where the projected growth would cause adverse environmental impacts.

Growth-inducing impacts fall into two general categories: direct and indirect. Direct growth-inducing impacts would occur if the Proposed Project directly increased population growth in the area. Providing urban services to a site, and the subsequent development, can serve to induce other landowners in the vicinity to convert their property to urban uses. Indirect, or secondary growth-inducing impacts, consist of growth induced in the region by additional demands for housing, goods and services associated with the population increase caused by, or attracted to, a new project.

Direct Impacts

The proposed Coyote Hills Project is a park restoration and public access project, consisting of components identified in the Land Use Plan Amendment, that would not result directly in any new housing or jobs in the area, and would not have any direct growth-inducing impacts. Therefore, the Proposed Project would not have a significant direct growth-inducing impact.

Indirect Impacts

The Coyote Hills Project would not significantly exceed growth that is projected for the city of Fremont. As a result of the Proposed Project, the public recreation opportunities of this area of Fremont would be enhanced. It is likely this would attract additional visitors to the area. However, the Project site is adjacent to Coyote Hills Regional Park, which is already open and used for recreation. The addition of visitor serving facilities such as parking lot, picnic area, and trails, and enhancement of the habitats and wetlands at the Project site would not be a major change to the area. It would not create any new housing, and would create at most one new job as a park ranger. Therefore, the Proposed Project would not have a significant indirect growth-inducing impact.

6.2 *Significant Unavoidable Impacts*

As discussed in 4.2 Cultural and Tribal Cultural Resources, disassembly of the Contractors Residence would result in a Significant and Unavoidable Impact on historic architectural resources. No other Significant and Unavoidable Impacts were found to result from the Proposed Project.

6.3 Significant, Irreversible Changes

CEQA requires that an EIR assess whether a project would result in significant irreversible changes in the environment. The CEQA Guidelines describe three distinct categories of irreversible changes that should be considered, as further detailed below.

Changes in Land Use that Commit Future Generations

As discussed in Section X. Land Use and Planning of the Initial Study (see **Appendix A**), the Proposed Project is consistent with the municipal land use plans of Fremont. The proposed Coyote Hills Project is not a development project, in the sense that it would restore the majority of land at the site to a more natural state, with the exception of visitor serving facilities including a parking lot, restroom, potable water, picnic area, trails, utility upgrades, entry kiosk, pedestrian and bicycle improvements at the intersection of Paseo Padre Parkway and Patterson Ranch Road, and interpretive elements. Because the Proposed Project would maintain almost all of the Project site as undeveloped, open space uses, it would not make land use changes that commit future generations. As discussed above, the Proposed Project would not have any significant indirect growth-inducing impacts. Therefore, the Proposed Project would not make land use changes that commit future generations.

Irreversible Damage from Environmental Accidents

The Initial Study, in Section VIII. Hazards and Hazardous Materials, (see **Appendix A**) found that irreversible changes to the environment could occur from accidental releases of hazardous materials, and disturbance and handling of soil contaminated with residual low-level pesticides, associated with Project development, but that implementation of mitigation measures identified in the Initial Study and compliance with hazardous materials regulations and policies would reduce this impact to a less-than-significant level. No other irreversible changes would result from implementation of the Proposed Project.

Consumption of Natural Resources

The Initial Study (see **Appendix A**) found that the number of facilities constructed by the Proposed Project that would require energy would be low, and therefore not result in a substantial increase in energy use, and that no agricultural lands would be converted and no access to mining reserves would be lost. Construction of the Proposed Project would involve energy use, but this use would not be wasteful or inefficient, nor would it require new or expanded electric power or natural gas facilities. For these reasons, the Coyote Hills Project would not result in a substantial increase in consumption of natural resources.

6.4 Impacts Found Not to be Significant

Under CEQA, environmental issues for which there is no likelihood of an impact do not need to be included in the EIR and may be “scoped out” during the EIR scoping process. The following issues were found to have less-than-significant or no impacts by the Initial Study and are not analyzed further in this EIR.

- ◆ Agriculture and Forest Resources
- ◆ Greenhouse Gas Emissions
- ◆ Land Use and Planning
- ◆ Mineral Resources
- ◆ Population and Housing
- ◆ Public Services

In addition, the Initial Study found no significant impacts after implementation of mitigation measures identified in the Initial Study in the following eight subjects, which are not analyzed further in this EIR:

- ◆ Aesthetics
- ◆ Air Quality
- ◆ Geology and Soils
- ◆ Hazards and Hazardous Materials
- ◆ Hydrology and Water Quality
- ◆ Noise
- ◆ Recreation
- ◆ Utilities and Service Systems

6.5 Cumulative Impacts

CEQA requires consideration of the potential cumulative impacts that could result from a project in conjunction with other similar projects in the vicinity. Such impacts can occur when two or more individual effects together create a considerable environmental impact or compound other environmental consequences. Current and reasonably foreseeable future projects in the vicinity of the Project site, consisting of proposed, approved, and under construction projects, are described in Chapter 4. Environmental Evaluation, Cumulative Impact Analysis. The potential cumulative effects of the Proposed Project are analyzed below. The goal of such an evaluation is twofold: first, to determine whether the combined impacts of all such projects would be cumulatively significant; and second, to determine whether the Proposed Project itself would cause a “cumulatively considerable” (and thus significant) incremental contribution to any such cumulatively significant impacts.

Aesthetics

The locations of proposed, recently approved, and under construction projects in the Project vicinity are dispersed. From any single vantage point in the Project vicinity, only one or a small number of these projects would be visible, and none of the projects would be visually prominent. Together, these projects would not significantly alter the mixed visual character to the Project vicinity, which consists of urban development east of the Project site and open space uses on and west of the Project site. For these reasons, the effects of past, current and probable future projects would not result in a significant cumulative impact on aesthetics. As an overall result of the Proposed Project, the aesthetic conditions of the Project site would remain in open space and be enhanced, for example by improving the appearance of the Park entry and maintaining views of the prominent Coyote Hills. Therefore, the Proposed Project would not have a cumulatively considerable impact on aesthetics because the incremental effects of the Project would not be considerable when viewed in connection with the effects of past, current and probable future projects. The Proposed Project’s cumulative impact on aesthetics would be *less than significant*.

Agriculture and Forest Resources

The Proposed Project would have little or no adverse impact on agriculture and forest resources, and therefore would not make a cumulatively considerable contribution to regional impacts on agriculture and forest resources. Current urban agricultural uses would be preserved, and facilitated or encouraged. The Proposed Project’s cumulative impact on agriculture and forest resources would be *less than significant*.

Air Quality

The Bay Area Air Quality Management District (BAAQMD) guidelines for CEQA analysis state:

“By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in [regional] nonattainment of ambient air quality standards. Instead, a project’s individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project’s contribution to the cumulative impact is considerable, then the project’s impact on [regional] air quality would be considered significant.”

“In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project’s individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region’s existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary.”

There are two general classes of air pollutants and cumulative significance is assessed differently for each. The first class, called “criteria” pollutants, have associated federal and/or state ambient air quality standards. For them, if project emissions cause an ambient concentration to exceed an ambient standard at a local receptor, this impact is considered to be cumulatively significant to regional air quality (especially if the region has a history of monitored violations of that ambient air quality standard, i.e., is a “nonattainment” area). But project emissions of a criteria air pollutant can also be cumulatively significant without causing local ambient air quality standards violations if they exceed the average daily and or maximum annual emission thresholds established by the BAAQMD in their CEQA Guidelines. The Proposed Project’s emissions of ozone precursors (ROG or NO_x) or inhalable/fine particulate matter from construction or operational sources would have no locally significant ambient air quality impacts, nor would they exceed the BAAQMD CEQA thresholds. Therefore, the Proposed Project would not contribute considerably to regional air quality problems with ozone or particulates and this cumulative impact would be *less than significant*.

For the 2nd class of air pollutants, called “toxic air contaminants” (TACs), their project-level and cumulative impacts are determined by separate cancer risk and non-cancer health hazard standards established by the BAAQMD in their CEQA Guidelines. If project emissions of a TAC cause risk/hazard levels at a local receptor within 1000 feet of the source to exceed the project-level thresholds, this would be a significant project-level TAC impact. If project TAC emissions plus the TAC emissions from all other sources within 1000 feet of a project site have total risk/hazard levels exceeding the BAAQMD cumulative thresholds at the receptor, this would be a significant cumulative TAC impact. There could also be cases where a project has a significant project-level impact, with no significant cumulative impact; or where it contributes to a significant cumulative impact, but has no significant project-level impact. For the Proposed Project, there are existing sensitive receptors within 1,000 feet of the Project site (i.e., the homes fronting Paseo Padre Parkway or Ardenwood Boulevard east of the site). But according to estimates of risk/hazard from Project construction TAC (from SCREEN3 dispersion analysis) and from the worst-case summation of risk/hazard from other existing TAC sources (from BAAQMD permit data or roadway screening) within 1000 feet of these residential receptors, the combined TAC emissions would not exceed the BAAQMD’s cumulative risk/hazard thresholds and the Project would not contribute considerably to significant cumulative TAC air quality impact; this would be *less than significant*.

Biological Resources

In the Project vicinity, the effect of the combination of the existing built environment, plus the proposed, approved, and under construction projects identified in 4 Environmental Evaluation, Cumulative Impact Analysis, has resulted in a historic and a significant loss of habitats, and significant reductions in the populations in a number of plant and animal species. As a result, these species have been identified by the state and/or federal governments as requiring protection. This is a significant cumulative impact on biological resources. Given the minimal adverse impact, and beneficial effects of the proposed habitat restoration and

enhancement, on biological resources expected by the Project, and the extensive project specific mitigation measures proposed for the Project, which would reduce the Project's adverse impacts to biological resources to a less than significant level, the Project would not have a cumulatively considerable impact on biological resources. Thus, the Proposed Project would not make a considerable contribution to significant cumulative impacts on biological resources. This impact would be *less than significant*.

Cultural Resources

The effect of the combination of past projects, current projects identified in the Project vicinity (see 4.2 Cultural and Tribal Cultural Resources, Cumulative Analysis), and probable future projects is a significant cumulative loss of cultural and archaeological resources, including Native American middens and human remains and historic architectural resources. Mitigation measures identified in this EIR (see 4.2 Cultural and Tribal Cultural Resources) would reduce the impact of the Proposed Project on archaeological resources, tribal cultural resources, and human remains to a less-than-significant level. Mitigation measures identified in this EIR also would reduce the impact of the Proposed Project on the historic Milk House to a less-than-significant level, but would not reduce the impact of disassembly of the Contractors Residence to a less-than-significant level. This component of the Proposed Project would result in a significant unavoidable adverse impact to the historic Contractors Residence. Given the past destructive activities on the Project site, and the significant unavoidable impact on the Contractors Residence, the Proposed Project would have a cumulatively considerable impact on cultural resources, when viewed in connection with the effects of past, current and probable future projects. The impact of the Project on cultural resources would be *significant and unavoidable*.

Geology and Soils

The Proposed Project would not cause any substantial changes to the geology at the Project site. New development at the Coyote Hills Expansion site would not increase the risk of geologic hazards. As it is likely that many of the park's visitors would be from the Bay Area or California, their visits to the Project site would not expose them to any greater risks than other parts of the East Bay shoreline because California is seismically-active in general.

The impacts of locating the proposed, approved, and under construction projects identified in the Project vicinity in a seismically active zone are mostly project specific local impacts that would not contribute to, in an additive sense, the cumulative impacts on geology and soils. Therefore, the effects of past, current and probable future projects would not result in a significant cumulative impact on geology and soils. The Proposed Project would not have a cumulatively considerable adverse impact on geology and soils, as the impact would be local and would not contribute to, in an additive sense, the cumulative impact. Moreover, the incremental effects of the Project, with mitigation, would not be considerable when viewed in connection with the effects of past, current and probable future projects. This impact would be *less than significant*.

Greenhouse Gas Emissions

Because no single project is individually large enough to result in a measurable increase in global concentrations of GHG emissions, climate change impacts of a project are considered on a cumulative basis in Initial Study Section VII Greenhouse Gas Emissions (see **Appendix A**). Construction of the Proposed Project would generate about 131 metric tons (MT) of GHG during its first year construction period. Because construction emissions are short-term and would cease upon completion, GHG from construction activities would only nominally contribute to GHG emissions impacts. Operation of the Project would contribute to global climate change through emissions of about 284 MT of GHG per year, mainly from transportation sources. Project GHG emissions would be substantially below the BAAQMD's 1,100 MT/year significance threshold. In addition, the Project would be consistent with the GHG reduction goals of California's AB 32, and the City of Fremont *Climate Action Plan*. For these reasons, the Project's cumulative contribution to GHG emissions during construction and operation would be *less than significant*.

Hazards and Hazardous Materials

The Proposed Project would not increase the impact of hazards or hazardous materials in the general vicinity of the Project area. Remediation of the potentially contaminated soils at the site, if necessary, and as stipulated in mitigation measures identified in the Initial Study (see **Appendix A**), would reduce the likelihood of release to the environment. The Project's hazardous material impact would be a local impact and would not contribute to the cumulative impact of hazardous materials. Likewise, other development projects in the Project area would not contribute to, in an additive sense, the cumulative impacts of hazardous materials to the environment. Therefore, the effects of past, current and probable future projects would not result in a significant cumulative impact on hazardous materials. Moreover, the Project would not make a cumulatively considerable contribution to a significant cumulative impact of hazardous materials because the incremental effects of the Project, with mitigation, would not be considerable when viewed in connection with the effects of past, current and probable future projects. This impact would be *less than significant*.

Hydrology and Water Quality

In the Project vicinity, the effect of the combination of the existing built environment, plus the proposed, approved, and under construction projects identified in 4 Environmental Evaluation, Cumulative Impact Analysis, is a significant increase in waterborne contaminants, and velocity and volume of stormwater runoff. This is a significant cumulative impact on hydrology and water quality. The Proposed Project would not have a cumulatively considerable adverse impact on hydrology and water quality since measures are required to be in place to avoid project-related water quality and hydrology impacts, and the Project would comply with applicable resource protection requirements for construction and operation of the Project that were created by agencies, such as the City of Fremont and the Regional Water Quality Control Board, to avoid water quality and hydrology impacts. As a result, the Proposed Project would not measurably contribute to cumulative water quality and hydrology impacts. Thus, the incremental effects of the Project, with mitigation, would not be considerable when viewed in connection with the effects of past, current and probable future projects. This impact would be *less than significant*.

Land Use and Planning

None of the projects that are proposed, approved, or under construction in the Project vicinity involve land uses that would physically divide an established community, create a significant land use conflict, conflict with applicable plans and policies, or increase existing conflicts with applicable plans and policies. Therefore, the effects of past, current and probable future projects would not result in a significant cumulative impact on land use and planning. As discussed in the Initial Study, the Coyote Hills Project has been found to have a less-than-significant impact on land use, and none of the proposed, approved, and under construction projects identified in the Project vicinity would be incompatible with the Proposed Project. For these reasons, the Project would not make a cumulatively considerable contribution to a significant cumulative impact on land use and planning because the incremental effects of the Project would not be considerable when viewed in connection with the effects of past, current and probable future projects. This impact would be *less than significant*.

Mineral Resources

The Proposed Project would not substantially affect the availability of designated mineral resources, and therefore would not make a cumulatively considerable contribution to cumulative impacts on mineral resources. The Proposed Project's cumulative impact on mineral resources would be *less than significant*.

Noise

The Proposed Project site would be used for recreation, a noise-sensitive land use according to the City of Fremont General Plan. Cumulative (Year 2035) traffic noise levels take into account projected vehicular trips along local roadway links generated by existing development plus anticipated growth in the Project area, including proposed, approved and under construction projects, as evaluated in 4.3 Transportation of this EIR. The Proposed Project would add only 0.01 dBA to the area's major arterial roadway links compared to Year 2035 baseline (without the Project), an increment that falls far short of the City of Fremont and Federal Transit Agency significance criteria. The cumulative projects in the Project vicinity would generate noise primarily through additional vehicle traffic. Motor vehicle traffic on Paseo Padre Parkway would grow by about 50% with a consequent 1.5 dB noise level increase over the next 20 years, but the Proposed Project would not make a cumulatively considerable contribution to the cumulative noise impact to sensitive receptors along the roadway. Thus, the Proposed Project would have a *less than significant* impact on cumulative noise.

Population and Housing

The Proposed Project would have little or no impact on population and housing, and therefore would not make a cumulatively considerable contribution to regional cumulative impacts on population and housing. The Proposed Project's cumulative impact on population and housing would be *less than significant*.

Public Services

The result of the proposed, approved, and under construction projects identified in the Project vicinity, in combination with past development, is a level of demand that could require new or physically altered police and fire facilities, including police and fire stations, police and fire protection vehicles and equipment, and police and fire protection personnel. This is a potentially significant cumulative impact on police and fire protection. As discussed in the Initial Study, Section XIV. Public Services, the Proposed Project would not require new or physically altered police or fire facilities. Because the Proposed Project would have a minimal effect on the need for new public services, including fire and police, the Project would not make a cumulatively considerable contribution to cumulative impacts on public services, when viewed in connection with the effects of past, current and probable future projects. Therefore, the Project's cumulative impacts on public services, including police and fire protection, would be *less than significant*.

Recreation

The projects that are proposed, approved, and under construction in the Project vicinity include two recreation projects that would improve recreational facilities and opportunities. These projects, singly, in combination, and in combination with past projects, would not create significant adverse impacts on recreation. Therefore, the effects of past, current and probable future projects would not result in a significant cumulative impact on recreation. The Proposed Project would provide new recreational facilities and would not impact other recreational facilities or contribute to the need for new or physically altered park and recreational facilities. Thus, the Proposed Project would not contribute to cumulative impacts on recreation. This impact would be *less than significant*.

Transportation and Traffic

Under Cumulative Base and Cumulative plus Project conditions, Commerce Drive and Patterson Ranch Road are forecast to operate at LOS F during both the morning and afternoon commute peak hours. The delay is due to increased vehicle through-traffic on Paseo Padre Parkway. Growth in vehicle traffic due to past, current and probable future projects in the Project vicinity would result in a *potentially significant* cumulative impact. The forecast delay resulting from the Proposed Project at the Patterson Ranch Road approach would increase by up to 25 seconds between Cumulative Base and plus Project conditions. With

implementation of Mitigation Measures TRANSP-1 and TRANSP -2 (see 4.3 Transportation and Traffic, above), the Proposed Project would not make a cumulatively considerable contribution to transportation and traffic. Therefore, the cumulative impact of the Proposed Project on transportation would be *less than significant*.

Tribal Cultural Resources

The effect of the combination of past projects, the current projects identified in the Project vicinity (see 4.2 Cultural and Tribal Cultural Resources, Cumulative Analysis), and probable future projects could result in a significant impact on tribal cultural resources, including Native American human remains. Mitigation measures identified in this EIR would reduce the impact of the Proposed Project on tribal cultural resources and human remains to a less-than-significant level. Therefore, the Project would not have a cumulatively considerable adverse impact on tribal cultural resources because the incremental effects of the Project would not be considerable when viewed in connection with the effects of past, current and probable future projects. Thus, the Proposed Project would not contribute to cumulative impacts on tribal cultural resources. This impact would be *less than significant*.

Utilities and Service Systems

In the Project vicinity, the effect of the proposed, approved, and under construction projects identified in Chapter 4 Environmental Evaluation, in combination with past development, is a level of demand that may require new or physically altered water supply facilities, including dams, reservoirs, pipelines, pumping stations, and water treatment plants. This is a significant cumulative impact on water supply. As discussed in the Initial Study, Section XVIII Utilities and Service Systems, the Proposed Project would not require new or physically altered water supply facilities, and the water demand of the Project would be temporary and minimal. Therefore the Project would not contribute to cumulative impacts on water supply facilities or utilities and service systems. This impact would be *less than significant*.

Summary of Cumulative Impacts

As discussed above, the Proposed Project would make a considerable contribution to significant cumulative impacts on cultural resources.

6.6 Relationship Between Short-Term and Long-Term Uses of the Environment

Potential environmental impacts of the Proposed Project would be offset by the implementation of Project components including habitat and wetland enhancement and restoration, protection and management of surface and groundwater, climate change and sea level rise adaption, and Climate Smart farming practices. The long-term purposes of the Proposed Project include protecting and managing surface water and groundwater resources, providing opportunities for urban agriculture, developing and managing the Expansion area to be adaptable and sustainable, and providing opportunities for Climate Smart education as well as scientific research and demonstration. The Proposed Project is intended to be sensitive to the Project site's environmental resources and is subject to California State standards and guidelines, many of which ensure that strategic choices take appropriate account of long-term costs and benefits.

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Appendix A

Initial Study

INITIAL STUDY
for

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT
CITY OF FREMONT, ALAMEDA COUNTY, CALIFORNIA

DRAFT
March 7, 2019

Lead Agency:

East Bay Regional Park District
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1.0 PROJECT DESCRIPTION AND PROPOSED DETERMINATION

1.1 Project Summary

The Coyote Hills Restoration and Public Access Project aims to restore habitat and add public access facilities to a 306-acre parcel that would become part of Coyote Hills Regional Park. The existing Coyote Hills Regional Park is located in the northwest corner of the City of Fremont, east of the Don Edwards San Francisco Bay Wildlife Refuge, and north of State Highway Route 84, leading to the Dumbarton Bridge (see **Figure 1 - Regional Location Map**). The 306-acre Expansion area borders the east side of the existing Regional Park; is bounded to the east by Ardenwood Boulevard and Paseo Padre Parkway; and is bounded to the north by the Alameda Creek Flood Control Channel.

The Proposed Project consists of two main components, a Land Use Plan Amendment (LUPA) and a Park Development Plan, both prepared by the East Bay Regional Park District (Park District). The LUPA amends the 2005 Coyote Hills Regional Land Use Plan to include the 306-acre Park expansion and its land uses. The Park Development Plan outlines the restoration and visitor-serving facilities and public access trail development proposed for the Expansion area. These components are discussed in more detail below.

The proposed Park expansion includes a new entry kiosk, parking lot, restroom and family picnic facilities, entry area improvements, Park signage, over 4 miles of new hiking trails, wildlife observation platforms, and approximately 130 acres of habitat restoration and enhancement. The Trail Plan would provide connections to the San Francisco Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway to the south and north, and a connection to the City's proposed Dumbarton Bridge to Quarry Lakes and other regional trails. A flood control and wetlands mitigation Project covering about 100 acres in the southern part of the Project area would be constructed in cooperation with Alameda County Flood Control and Water Conservation District.

Proposed habitat restoration and enhancement types would include willow thicket and mixed riparian forest along and adjacent to Patterson Slough north of Patterson Ranch Road, as well as oak savanna, seasonal wetlands, and enhanced grasslands. The Project would protect existing views of the Coyote Hills along Paseo Padre Parkway, continue urban agriculture along this corridor, and preserve, protect and interpret the site's rich natural resources, Native American culture, and historic resources. Urban agriculture and agricultural-related activities, such as a farm stand, would be located on approximately 45 acres of land south of Patterson Ranch Road and north of Ardenwood Creek.

Provisions of Park District Ordinance 38 applicable to the adjoining Coyote Hills Regional Park would be extended to the Park Expansion area. As such, Park operating hours would be from dawn to dusk and no lighting other than security lighting in areas of buildings would be provided. Consistent with current regulations at Coyote Hills Park, the Park Expansion area would be designated as a "Leash Required Area" for Park visitors with dogs, with no leash optional open areas. Signage and fencing would be used to keep Park visitors, including un-leashed dogs, on trails and other designated public areas and out of existing and restored habitat. The remnant existing and restored willow thicket and mixed riparian area along Patterson Slough would be fenced, signed, and designated as a "Special Protection Feature." All general public access would be restricted from this area, with the exception of a foot path spur trail leading to a wildlife observation platform on the southwest end of the Slough. The west Slough overlook or footpath would follow an existing dirt maintenance access road to a proposed wildlife observation platform at the location of the demolished former Farm Labor House dormitories. These were demolished in 2016.

Restoring Park resources and managing the Park as a "Climate Smart Park," including accommodating climate change and anticipated San Francisco Bay sea level rise-related threats to the Park's resources, and using urban agriculture and a relatively large native tree afforestation Project to trap or sequester atmospheric carbon and other greenhouse gases (GHGs), are other important components of the Proposed Project. The Project would also provide opportunities for cooperative research and public education on these issues within the Park Expansion area. The Project components would be implemented over a three- to five-year period, as funding and capacity allows.

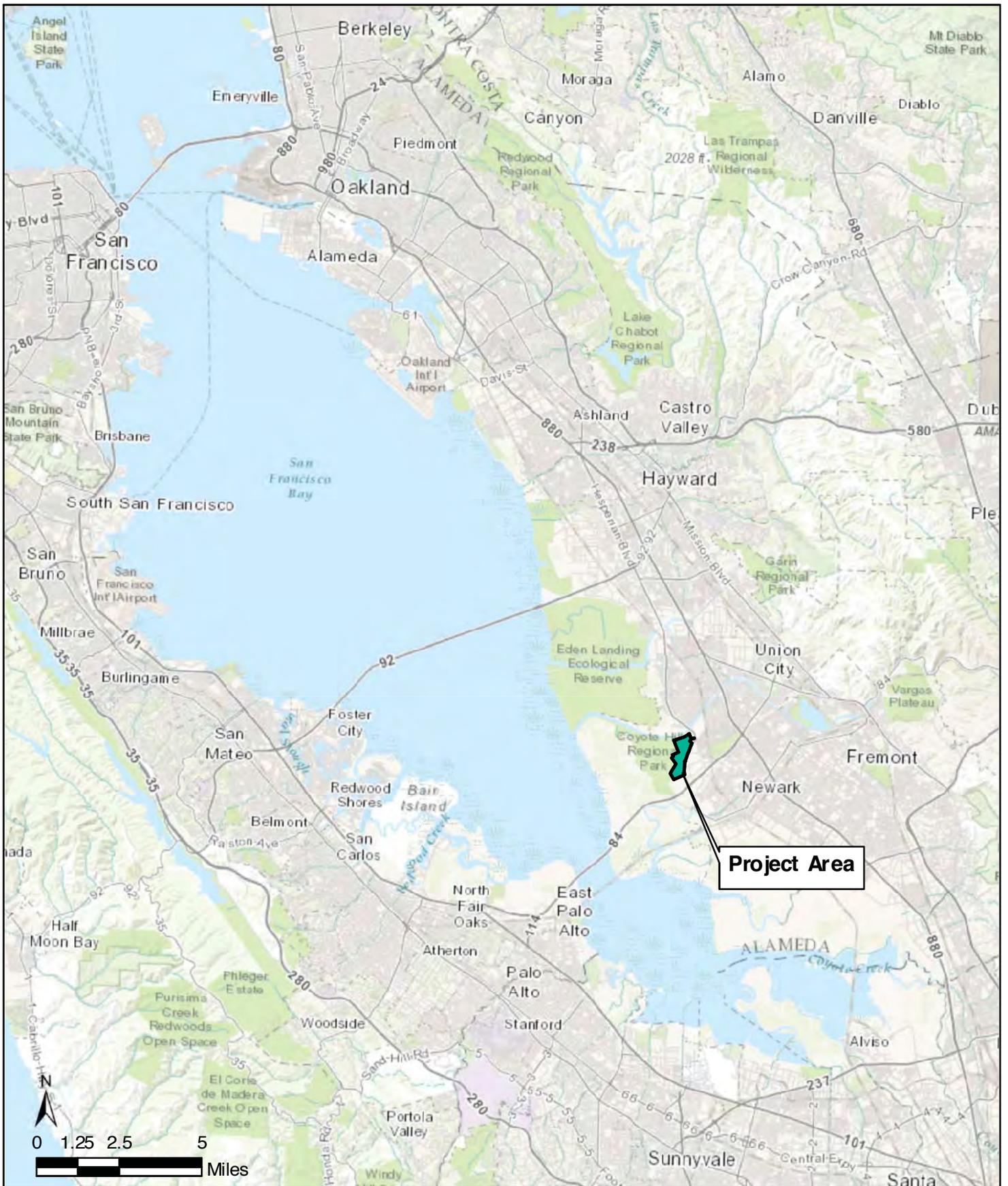


FIGURE 1
REGIONAL LOCATION MAP
COYOTE HILLS LAND USE PLAN AMENDMENT

DATE: 2-19-19

As lead agency, the Park District has prepared this environmental document in accordance with the California Environmental Quality Act (CEQA). This document presents the recommendations and actions contained in the LUPA that would result in physical changes to the baseline environmental conditions within the Project Area. The proposed physical changes, referred to collectively as the “Project,” are summarized in this Project Description. Additional, more detailed descriptions of these proposals, as found in the LUPA and supporting documents for the Park Development Plan, including the Existing Environmental Conditions and Opportunities and Constraints Report, are incorporated by reference into this CEQA document.

1.2 Planning and Design Principles and Program Objectives

The LUPA and Park Development Plan have been developed with the following general design principles and planning objectives:

- Ensuring integration of the Expansion area with the existing Regional Park facilities, uses and resources, as well as the resources of the greater Coyote Hills area.
- Protecting and/or enhancing cultural resources, including providing compatible recreational and interpretive opportunities.
- Protecting and/or enhancing biological resources, while providing recreation, educational and interpretive opportunities.
- Providing for public safety, cultural and biological resource preservation at Coyote Hills through the removal of the deteriorated Contractors residence which has become an attractive nuisance and fire and public safety hazard, and encroaches into sensitive cultural and biological resource areas.
- Removing the Contractors residence in a way that balances cultural and biological resources protection with a wise use of public resources and in a timely manner.
- Protecting and managing surface water and groundwater resources within the Park Expansion area, in cooperation with local agencies.
- Providing opportunities for urban agriculture.
- Providing opportunities for a variety of outdoor recreation activities, including hiking and bicycling, wildlife viewing, picnicking and environmental education.
- Developing and managing the Expansion area to be adaptable and sustainable, with awareness of a changing climate that may affect habitat and public access.
- Designing improvements for low maintenance, high durability and to reduce park operating cost, where feasible.
- Providing opportunities for Climate Smart education as well as scientific research and demonstration through pilot Project programs.

A more complete description of Project Goals and Objectives is included in the LUPA.

1.3 Land Use Plan Amendment and Park Development Plan

Land Use Plan Amendment Unit Designations

The Project Area varies across the 306 acres with respect to soil and hydrologic conditions, plant and wildlife habitat, and current use. To create a land use and development plan appropriate for these varied characteristics, the Project Area has been separated into three Land Use designations subdivided into five Planning Units. These are shown in **Figure 2 – Land Use Units and Facilities Map Amendment** and summarized below in **Table 1 - Plan Summary**. Each Planning Unit encompasses a geographic region of similar use and physical and biological conditions. The Planning Units (units) are used in LUPA where they are referred to as the five Land Use Plan Amendment Units. Proposed trails and visitor-serving facilities are also briefly discussed in this section for each unit, and more

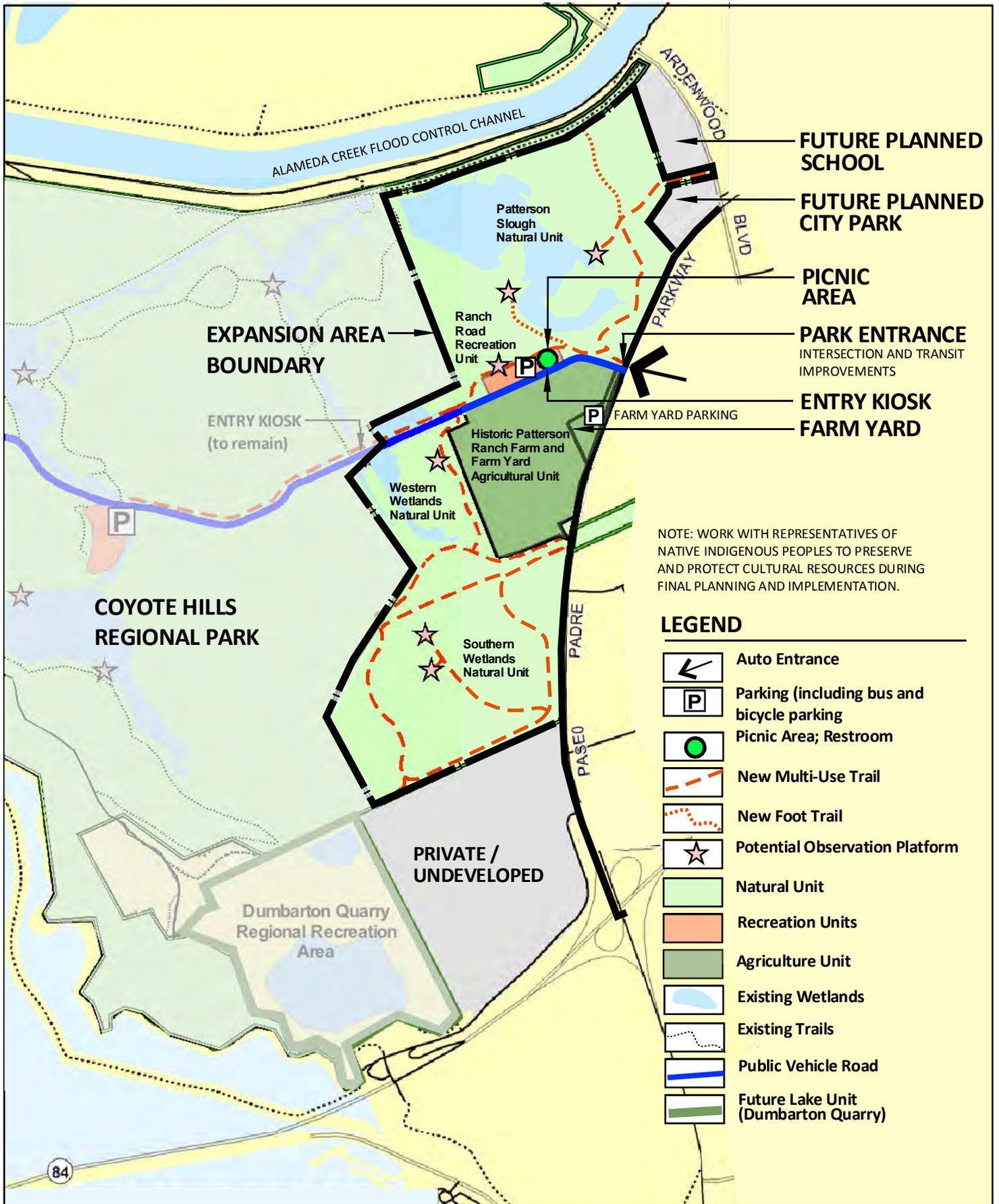


FIGURE 2
LAND USE UNITS AND FACILITIES MAP AMENDMENT
COYOTE HILLS LAND USE PLAN AMENDMENT
 DATE: 3-5-19

fully described in the subsequent section on the proposed Park Development Plan.

Table 1: LUPA Plan Summary

Land Use Designation	Planning Unit	Acreage
Natural	Patterson Slough	126
	Western Wetlands	29
	Southern Wetlands	99
Agricultural	Historic Patterson Ranch Farm	45
Recreational	Ranch Road Recreation	7
Total		306

The three land use designations are: Natural Use, Recreational Use, and Agricultural Use. A majority of the Project Area is designated for Natural Use (254 acres). The Natural Use designation includes three of the planning units: Patterson Slough, Western Wetlands, and Southern Wetlands. Development of the three Natural Use Units would consist of habitat restoration and enhancement, flood control and wetlands mitigation, and trail development. The Agricultural Use designation includes the Historic Patterson Ranch Farm Unit, which would continue to be used for agricultural purposes. The Recreational Use designation includes the Ranch Road Recreation Unit that would be used for trails, parking and other Visitor-serving facilities.

The focus of designated Natural Units is on wildlife habitat and native plant community management. Visitor-serving facilities such as parking areas, restrooms, and picnic areas occur in Recreation Units. Farming, livestock, and grazing are the principal designated land-uses in Agricultural Units. Included in this designation are areas for repair and storage of farm equipment and machinery, and crop processing and storage, such as hay storage. Also specifically allowed in the Agricultural Units are farm stands for produce sale. Public access trails, small trail head and staging areas, wildlife viewing platforms, and interpretive panels and displays are allowable uses in all Units. The public access trails would also be used for Emergency Vehicle and Maintenance Access (EVMA). Each of the Planning Units, its location, and current and future use as proposed are described below.

Patterson Slough Natural Unit

The Patterson Slough Natural Unit is the northernmost Unit of the Project Area. The Unit covers 126 acres and lies north of Patterson Ranch Road. The Patterson Slough drainage way is in the approximate center of the Unit, flowing slowly northeast through the DUST Marsh to eventually drain to the Alameda Creek Flood Control Channel. A remnant willow-dominated riparian forest containing abundant invasive weeds lines the Slough. This area has known culturally sensitive resources that would be protected during restoration by installing Environmentally Sensitive Area (ESA) fencing around sensitive areas, and by requiring the presence of a qualified Cultural Resource Monitor and representatives of the Ohlone peoples when soil disturbance associated with restoration, demolition, and limited trail construction work occurs in sensitive areas. Restoration and enhancement may include activities such as topsoil grading/tilling, seeding, planting, soil amendment (compost addition) and temporary irrigation, followed by several years of vegetation management, such as flail mowing. These activities would be implemented as needed to exhaust the weed-seed bank in the topsoil, with the revegetation and restoration work establishing areas of willow sausal or willow thicket, mixed riparian forest, oak savanna, seasonal wetlands, and native grasslands. Up to 6,000 to 8,000 native trees and shrubs, including oaks planted as acorns and seedlings, and live cottonwood and willow stakes, would be planted in this area over a proposed three- to five-year implementation period. Other native tree and shrub species obtained from nurseries primarily located in the East Bay including coast live oak (*Quercus agrifolia*), western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), arroyo willow (*Salix lasiolepis*), and box elder (*Acer negundo*).

Shallow depressions would be created to establish seasonal wetland by either shallow excavations (~1-2 feet) below current grades/elevations, or by importing clean soil to cap over existing grades to establish a more complex topography and support wetland creation. Grassland and oak savanna areas considered too dry for riparian resto-

ration would be mowed and/or grazed for fire fuels management, weed control and agricultural purposes.

A trail system would be constructed connecting the existing Crandall Creek Trail, the San Francisco Bay Trail and the Ranch Road Recreational Unit trails. The new trails would include paved multi-use segments and foot paths, with two spur trails to wildlife observation platforms along the east and west sides of Patterson Slough. The wildlife observation platforms would be setback a minimum of 100 feet from the edge of Patterson Slough in voluntary compliance with City of Fremont Watercourse Protection requirements per Municipal Code Section 18.210.120. As part of a future phase of the project, the Park District would cooperate with the City of Fremont and the Alameda County Flood Control and Water Conservation District (ACFCWCD) in constructing an approximately 550-foot long, 10-foot wide clear span aluminum walkway cantilevered (attached) to the west side of the existing Ardenwood Boulevard Bridge over Alameda Creek. This offsite improvement would significantly enhance pedestrian and bicycle safety for the north-south connection of the San Francisco Bay Trail over Alameda Creek.

Western Wetlands Natural Unit

The Western Wetlands Natural Unit is located south of the Paterson Slough Natural Unit and west of the Historic Patterson Ranch Farm Agricultural and Ranch Road Recreational Units. This 29-acre low-lying area contains a large, depressional wetland that ponds water during the winter rainy period, as well as areas that are slightly saline and sodic (salt- and sodium-affected). Although this area has been previously farmed, which required an agricultural drainage system, that system has since deteriorated and the area is now no longer suitable for farming. The plant cover is mostly invasive weedy species. The plan proposed for this area includes actions such as converting weedy areas to native grassland pasture, and managed/timed flooding of depressional ponded areas in the late summer and fall months to provide a fresh water source for wildlife use. This option depends on the availability of irrigation water from a nearby irrigation line that was once used to flood irrigate fresh water wetlands and seasonal wetlands in Coyote Hills Regional Park to the west. Minor surface grading (~1-2 feet in depth) would be used to enhance and expand seasonal wetland areas. A north-south multi-use connector trail (Harvest Trail) would run on uplands along the east side of this Unit, adjacent to agricultural fields. Native cottonwood and willow trees, similar to the current open stand of these trees to the west, would also be planted.

Southern Wetlands Natural Unit

The Southern Wetlands Natural Unit covers the southernmost land of the Project Area. This 99-acre Unit extends from the Western Wetlands Unit and Line P/Ardenwood Creek to the southern property boundary formed by the levee separating it from adjacent Cargill, Inc., lands. ACFCWCD would oversee the development, monitoring, and management of the flood control and habitat restoration elements of this Unit. This previously farmed and now fallow and ruderal area will be restored to create a mix of riparian, freshwater and seasonal wetlands, saline-alkaline wetlands, and oak savanna. Maintenance access roads would be constructed for the maintenance and monitoring activities required by the ACFCWCD, and would also provide public multi-use trail access. The Park District would be responsible for constructing and/or installing interpretive signage, wildlife observation areas, a short connector trail west of the mitigation area, and a new 80-foot long vehicular clear span bridge over Ardenwood Creek. The Park District would also be responsible for operating, and monitoring public access use within this Unit.

Historic Patterson Ranch Farm and Farm Yard Agricultural Unit

The 45-acre Historic Patterson Ranch Farm fields south of Patterson Ranch Road and immediately west of Paseo Padre Parkway in this designated Agricultural Unit would continue to be used for small-scale, local agriculture crop production, including field and row crops, pasture and hay lands, and grazing. In addition to agricultural land uses, the Farm Yard portion of the Unit would allow the adaptive re-use of a historic farm building (the Milk House) as a produce stand or other agriculturally related use. This area would also include a small, 20-car parking lot to serve users in this area. Two modern metal storage buildings would remain onsite and would continue to be used for supporting agricultural or Park operation-related activities. New utilities, including domestic water and electric service, would be extended to the existing farm buildings in the Farm Yard area. The Farm Yard entry-road, located south of Patterson Ranch Road and near to Paseo Padre Parkway, would be relocated, the area landscaped, and a new Park Entry sign installed. Connections would also be made to the new San Francisco Bay Trail along the west side of Paseo Padre Parkway, and the Bay Trail would be extended south to the vicinity of Dumbarton Circle and Quarry Road, an additional approximately 1,00 feet. The trail construction work would occur within a

weedy/ruderal area within the City of Fremont Paseo Padre Parkway Road ROW The Park District would cooperate and coordinate with the City in the construction and operation of the trail and any needed Dumbarton Circle-Paseo Padre Parkway intersection improvements.

Ranch Road Recreational Unit

Recreation and visitor-serving facilities are proposed for this approximately 7-acre Recreational Unit, located north of Patterson Ranch Road and immediately west of Paseo Padre Parkway, including an approximately 100-car asphalt-paved parking lot, a one-acre open-use area, restroom with plumbing, picnic facilities, and a new park entry kiosk. The existing Tuibun Trail, which runs between Paseo Padre Parkway and the existing Visitor Center, a distance of about 1.5 miles, would be relocated to the north of the proposed parking lot and improved in this Unit. New utilities and utility upgrades, including new water service, gas, sewer, and underground electrical and communications cables, would run through this Unit, within or adjacent to the existing road and trail, to the restroom and picnic area. These utilities would also be extended within the Patterson Ranch Road prism to the Visitor Center (see also **Utilities** section).

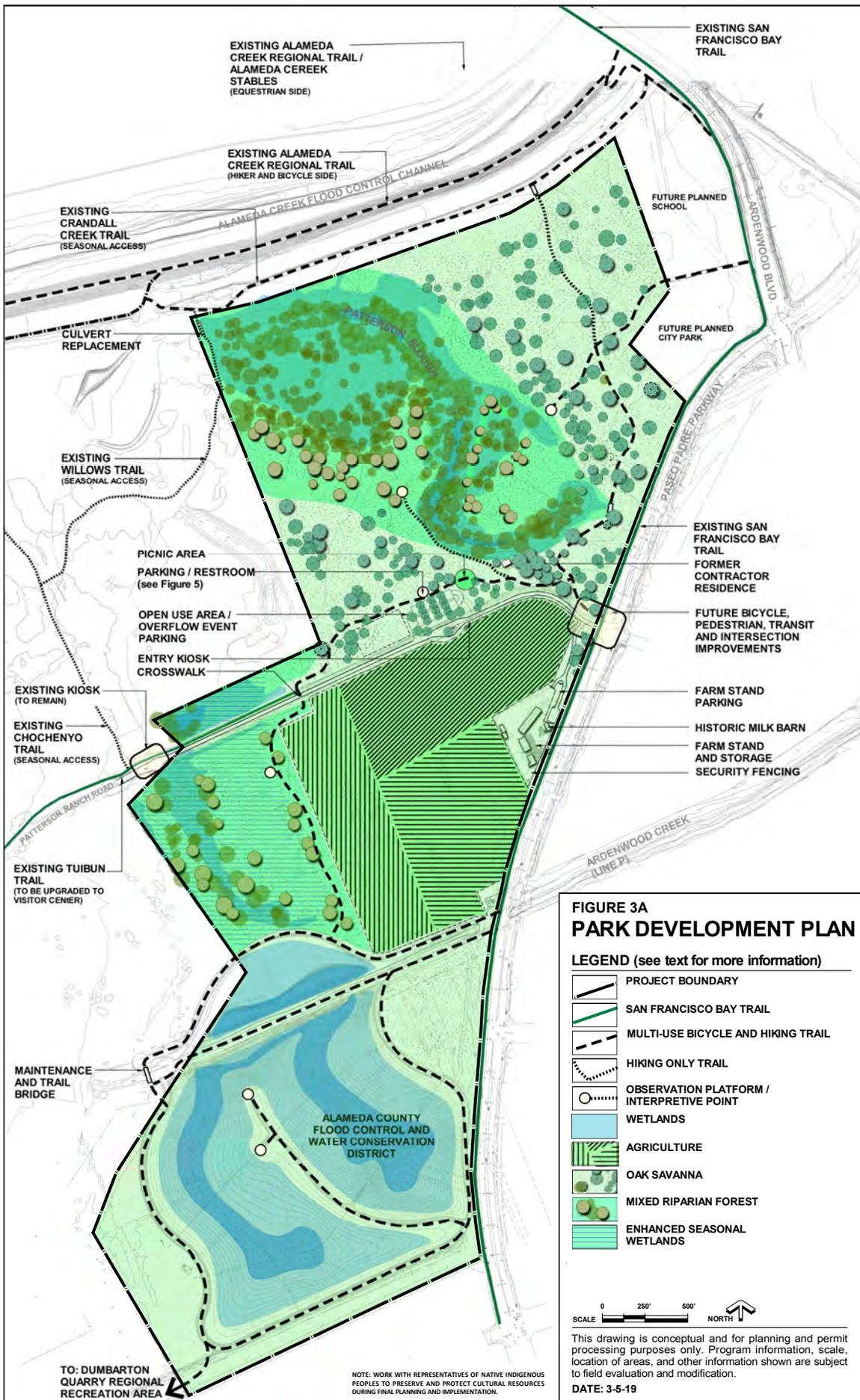
Park Development Plan

The proposed Park Development Plan has eight main elements:

1. *Habitat Restoration and Enhancement*
2. *Recreation and Visitor-serving Facilities*
3. *Public Access Trail Construction and Operation*
4. *Cultural Resources Management*
5. *Agricultural Land Uses and Associated Activity*
6. *Surface Water and Groundwater Management*
7. *Utility Upgrades and Extensions*
8. *Climate Change and Sea Level Rise*

1. Habitat Restoration and Enhancement

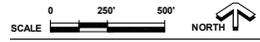
Habitat restoration and enhancement actions would focus on protecting, expanding and enhancing the unique and historical willow sausal (willow thickets), expanding to the east and west the mixed riparian forest along Patterson Slough, and creating ecologically complimentary seasonal wetlands/oak savanna and native grassland areas for wildlife habitat and agricultural grazing adjacent to the Slough in the Patterson Slough Natural Unit. Restoration and enhancement also include creating and enhancing freshwater and saline-alkali seasonal wetlands and willow and cotton wood tree cluster plantings in the Western Wetlands Natural Unit. These land cover types are generally shown in **Figure 3A - Park Development Plan** and summarized in **Table 2**. This is a graphic or rendered version of the Plan. **Figure 3B** presents similar conceptual plan information on a recent aerial photographic base to allow readers to view the location of Proposed Project facilities with respect to landmarks and key features, such as roadways, streams and the Patterson Slough riparian corridor. Key setback distances from the edge of the sensitive Patterson Slough riparian corridor edge are also indicated on this aerial Concept Plan drawing. Target acreages for restoration and enhancement are presented in **Table 2**. These are based on the current understanding of site hydrology and soil conditions and are approximate. Additional soil and hydrologic fieldwork would be completed along with pilot or test plantings to develop a final Restoration Planting Plan, established Irrigation Plans, and post-planting Vegetation and Invasive Species Management Plan prior to full-scale implementation over a three- to five-year period. Public access facilities and Trail Plan Implementation would occur during the Year One pilot or planting period.



**FIGURE 3A
PARK DEVELOPMENT PLAN**

LEGEND (see text for more information)

- PROJECT BOUNDARY
- SAN FRANCISCO BAY TRAIL
- MULTI-USE BICYCLE AND HIKING TRAIL
- HIKING ONLY TRAIL
- OBSERVATION PLATFORM / INTERPRETIVE POINT
- WETLANDS
- AGRICULTURE
- OAK SAVANNA
- MIXED RIPARIAN FOREST
- ENHANCED SEASONAL WETLANDS



This drawing is conceptual and for planning and permit processing purposes only. Program information, scale, location of areas, and other information shown are subject to field evaluation and modification.

DATE: 3-5-19

Table 2: Land Cover Area Acreage Target

Land Cover Designation	Possible Range (Acres)
Willow sausal and mixed riparian forest, cottonwood-willow grove	50 – 65
Seasonal Wetlands	8 – 12
Oak savanna	25 – 35
Managed and enhanced grasslands and pasture, complex topography	50 – 60
Agriculture, field and row crops	43 – 48
Roads, trails, parking, Farm Yard, and miscellaneous developed areas	5 – 7
Native landscaped areas	8 – 10
Existing willow thickets and mixed riparian forest (to be enhanced and protected)	12
Existing freshwater seasonal and saline seasonal wetlands (to be enhanced and protected)	6.5
Flood Control Basins, Mitigation freshwater, perennial, seasonal and saline-alkali wetlands, riparian and savanna	92 – 99

Several years of active vegetation management would occur as part of habitat restoration, including pest and weed control, mowing and/or goat grazing, and seasonal irrigation during a 3-year plant establishment period. Other than selective and careful removal of several inches of the surface weed-seed containing topsoil, and replacement with imported soil and compost in some habitat restoration and enhancement areas, the proposed restoration and enhancement program for most areas would be achieved without employing large-scale grading or significantly changing site hydrologic conditions. Grasslands restoration would focus on the most visually prominent areas as seen from Ardenwood Boulevard, Paseo Padre Parkway and Patterson Ranch Road.

New seasonal wetlands would be created by grading 1- to 2-foot deep, un-drained or depressional basins in the lower lying areas, along the west side of the Park Expansion area.

Existing depressional areas may be unseasonably (late summer to fall) flooded for improved habitat value and bird watching, depending on the availability of irrigation water. This would involve reactivation of an existing irrigation line located immediately west of the Western Wetlands, and connecting it to an existing irrigation well as a source of water. Additional bird roosting areas would be created by planting willow and cottonwood trees in the seasonal wetlands along the west side of the Project, both north and south of Patterson Ranch Road.

2. Recreation and Visitor-serving Facilities Construction and Operation

Recreation and Visitor-serving Facilities are proposed for the Ranch Road Recreation Unit and the Farm Yard portion of the Historic Patterson Ranch Farm Agricultural Unit. The proposed changes and improvements to the Park Entry and Farm Yard Area, and current Parking Concept, are shown in **Figures 4 - Entrance Concept** and **5 - Parking Concept**, respectively. The final plans for these areas would include the Project elements listed below and within the general facility footprints shown, but the layout and arrangement of the components may vary. Proposed facilities, as shown on the draft Conceptual Site Plan, are summarized in **Table 3 – Summary of Visitor-Serving Facilities**. Park visitors using the new recreation facilities, including trails, would be subject to Park District rules and regulations, as contained in Park District Ordinance 38 (www.ebparcs.org/ord38). Normal hours of operation would be dawn to dusk.

Visitor-serving facilities include an approximately 100-car paved parking lot occupying about 1 acre of land, and an approximately 1-acre grassed open-use recreation area available for use by visitors, and to serve as a visual buffer between the Tuibun Trail and Patterson Ranch Road. The open use area would initially be used as interim parking and a restoration staging area, and may also be used for staging Park-related operations and maintenance activi-

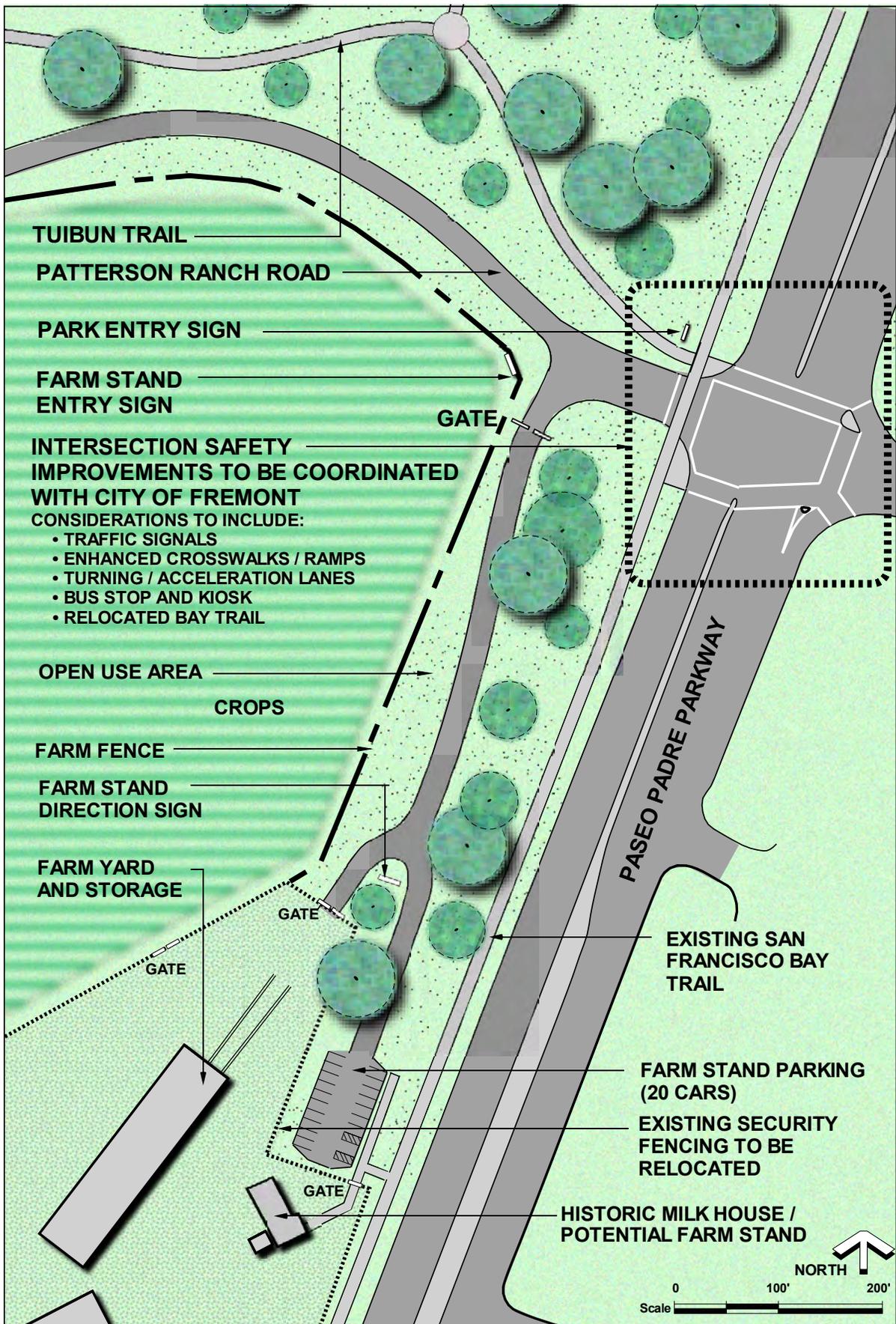


FIGURE 4
ENTRANCE CONCEPT

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

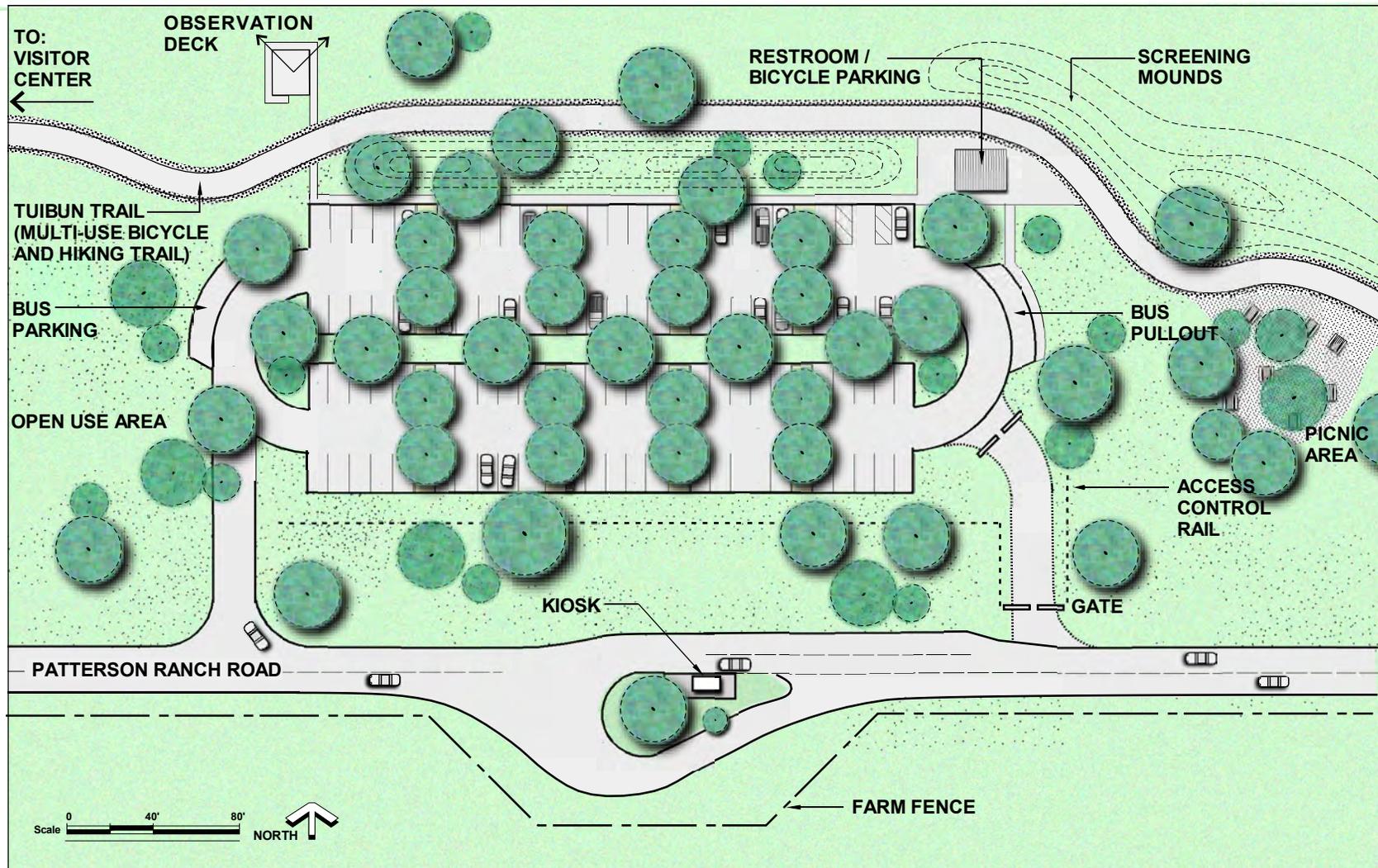


FIGURE 5
PARKING CONCEPT

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

ties such as tractor mowing, grazing, mosquito abatement, or overflow parking during special events. Visitor-serving facilities also include a new restroom facility with water and flush toilets, potable water, wildlife overlook future picnic area, interpretive elements, and new entry kiosk. Bus and bicycle parking would also be provided. A new Park entry sign, landscape plantings, and fencing would be installed at the Park entry. No park lighting is proposed other than security lights in the Farm Yard area.

The proposed parking lot and picnic facilities are located approximately 150 and 100 feet away (respectively) from the edge of the Patterson Slough Riparian Corridor. These areas would be screened from the Slough by crating low mounds (2 to 4 feet high), landscaped with native trees and shrubs.

Pedestrian and bicycle improvements would be provided within the Project area on the west side of the intersection of Paseo Padre Parkway and Patterson Ranch Road. These improvements would be constructed in cooperation with the City of Fremont, and could include accessible curb ramps, striping, signage, and traffic calming measures, and a sidewalk or path on the south side of Patterson Ranch Road to connect the existing Bay Trail to a proposed Farm Stand area. Utilities to serve the Visitor Center, including water, electrical and sanitary service may be upgraded or replaced within or adjacent to the existing road and trail.

Table 3: Summary of Visitor-Serving Facilities

1.	100-car parking lot with bus parking (+/- 1 acre)
2.	Open use area (+/- 1 acre)
3.	Restroom with flush toilets and sinks / drinking fountains with domestic water
4.	Picnic area* (+/- 1/2 acre) and other Site Furnishings <ul style="list-style-type: none"> • Up to 12 tables • Up to 5 BBQ facilities
5.	Kiosk/ticket booth with vehicle pullout
6.	Up to 10 interpretive panels
7.	Up to six wildlife observation platforms (Figure 7-5D) with some interpretive panels in Natural and Recreational Units
8.	Fencing <ul style="list-style-type: none"> • 6' deer or orchard fencing around agricultural fields Two-rail fencing around front of parking and picnic areas • 4' wire field fence around Visitor Serving Facilities, Farm Yard, and portions of Ardenwood Boulevard and Paseo Padre Parkway – Bay Trail • 4' straight wire field fencing separating trails from restoration and enhancement areas. These areas would also have “Stay on Trail” signs and “Habitat Restoration – Keep Out” signs • 6' security fence around portions of Farm Yard buildings
9.	20-car parking lot in Farm Yard Area
10.	Preservation and possible (future) adaptive reuse of historic Milk House building in Farm Yard area
11.	Possible new Farm Stand designed to 1930s architecture and using materials salvaged from on-site sources
12.	Domestic water, sewer, other utilities within Project Area and extension or utility upgrades to Visitor Center
13.	Bus turnout and bus shelter along Paseo Padre Parkway, south of Patterson Ranch Road intersection
14.	Approximately 4 miles of new, improved or relocated paved multi-use trail and 0.5 miles unpaved foot trails

* No group picnic area provided and no picnic area reservations would be taken.

Parking

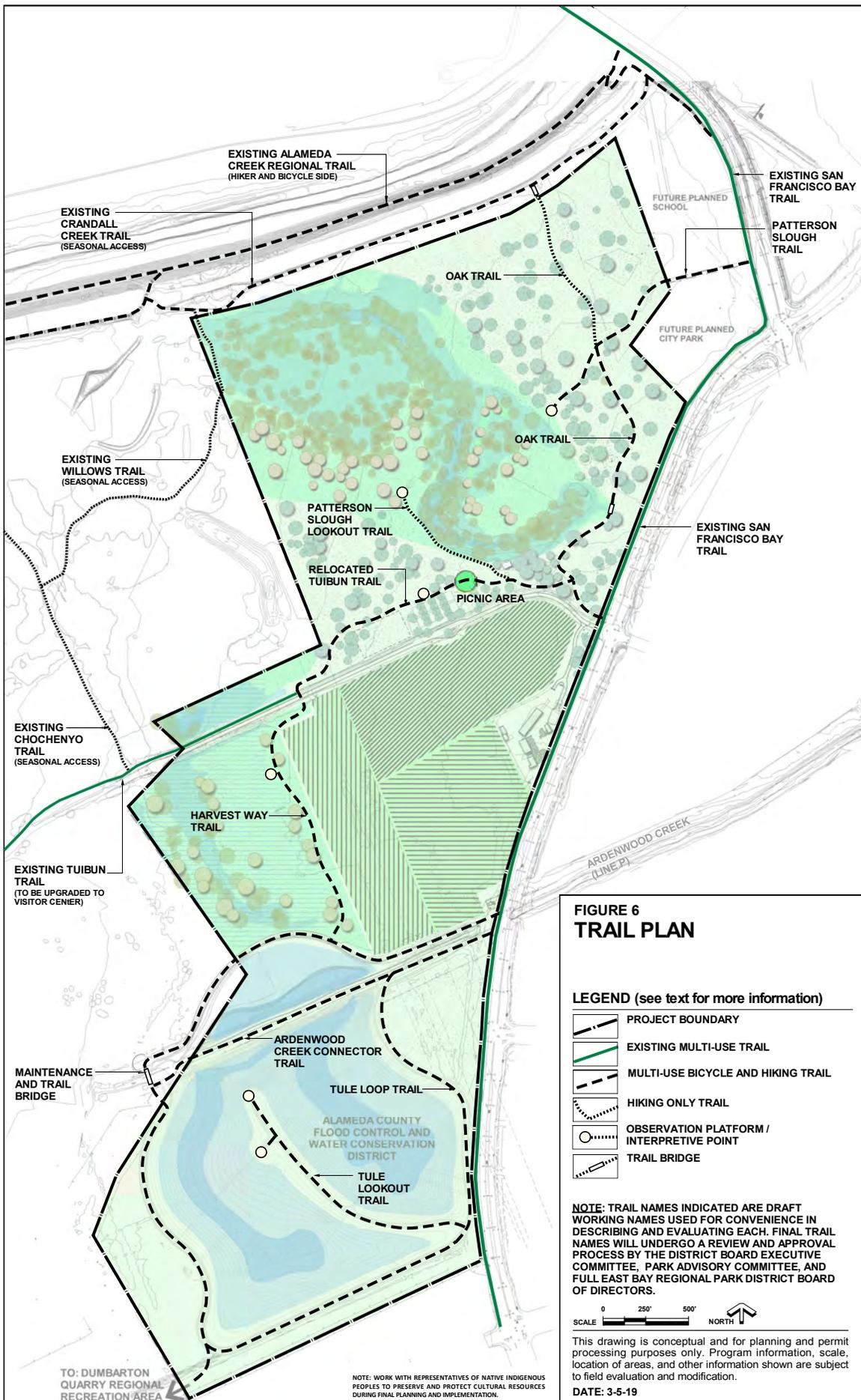
The Project Plan calls for reconfiguring and relocating existing vehicle parking within the Project area and immediately adjacent areas of Coyote Hills Regional Park, including new parking at a 100-car paved parking lot on the north side of Patterson Ranch Road located approximately 1,000 feet west of the Paseo Padre intersection. Additional overflow/event parking will also be provided on an adjacent upland area. The open use grassy area could potentially be used for up to 100 vehicles for overflow parking during special events.

3. Public Access Trail Construction and Operation

Approximately 4 miles of new, improved and relocated trails are planned for the Park Expansion Project area, with a continuous north-south multi-use trail that traverses the entire area, including the proposed Oak Trail, Patterson Slough Trail (utilizing an easement to connect to Ardenwood Boulevard), Harvest Way Trail (west of the farm lands), and Tule Trail segments (in the ACFCWCD southern area). The trail system would provide connections to the San Francisco Bay Trail along Paseo Padre Parkway and Ardenwood Boulevard, and to existing trails within the adjacent Regional Park (**Figure 6 – Trail Plan** and **Table 5 -Trail Summary**).

Three types of trails are planned: 1) multi-use bicycle and hiking trails (**Figure 7A**); 2) natural surface hiking trails (**Figure 7B**); and 3) improved flood control maintenance access roads to be used for trails in the Southern Wetlands Unit (**Figure 7C**). The ACFCWCD maintenance roads would also be used for Park maintenance activities and for mosquito control access, in addition to being proposed for multi-use trail usage.

The natural surface foot trails (approximately 0.5 miles total) may be 6 to 8 feet wide, with minimal improvements, and designated for pedestrian use only (no bicycles allowed). Portions of these pedestrian trails may not be fully accessible during periods of heavy rain due to soft soils and/or ponded/flooded conditions. Some foot trails in non-wetland areas may be elevated up to 6 to 8 inches above grade with aggregate base or gravel, and constructed with small diameter culverts or other drainage crossing structures, such as puncheon footbridges, or drainage lenses. Pedestrian-only trails are planned within the more sensitive portions of the Natural Units. The Patterson Slough Lookout Trail is located on an existing dirt farm road with the wildlife observation platform located in the former and now demolished farm worker housing area, as shown on **Figure 6 – Trail Plan**. **Figure 8** shows the envisioned wildlife observation platforms. Some trails including the Patterson Slough lookout spur may be subject to seasonal closure.



**FIGURE 6
TRAIL PLAN**

LEGEND (see text for more information)

- PROJECT BOUNDARY
- EXISTING MULTI-USE TRAIL
- MULTI-USE BICYCLE AND HIKING TRAIL
- HIKING ONLY TRAIL
- OBSERVATION PLATFORM / INTERPRETIVE POINT
- TRAIL BRIDGE

NOTE: TRAIL NAMES INDICATED ARE DRAFT WORKING NAMES USED FOR CONVENIENCE IN DESCRIBING AND EVALUATING EACH. FINAL TRAIL NAMES WILL UNDERGO A REVIEW AND APPROVAL PROCESS BY THE DISTRICT BOARD EXECUTIVE COMMITTEE, PARK ADVISORY COMMITTEE, AND FULL EAST BAY REGIONAL PARK DISTRICT BOARD OF DIRECTORS.



This drawing is conceptual and for planning and permit processing purposes only. Program information, scale, location of areas, and other information shown are subject to field evaluation and modification.

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NOTE: WORK WITH REPRESENTATIVES OF NATIVE INDIGENOUS PEOPLES TO PRESERVE AND PROTECT CULTURAL RESOURCES DURING FINAL PLANNING AND IMPLEMENTATION.

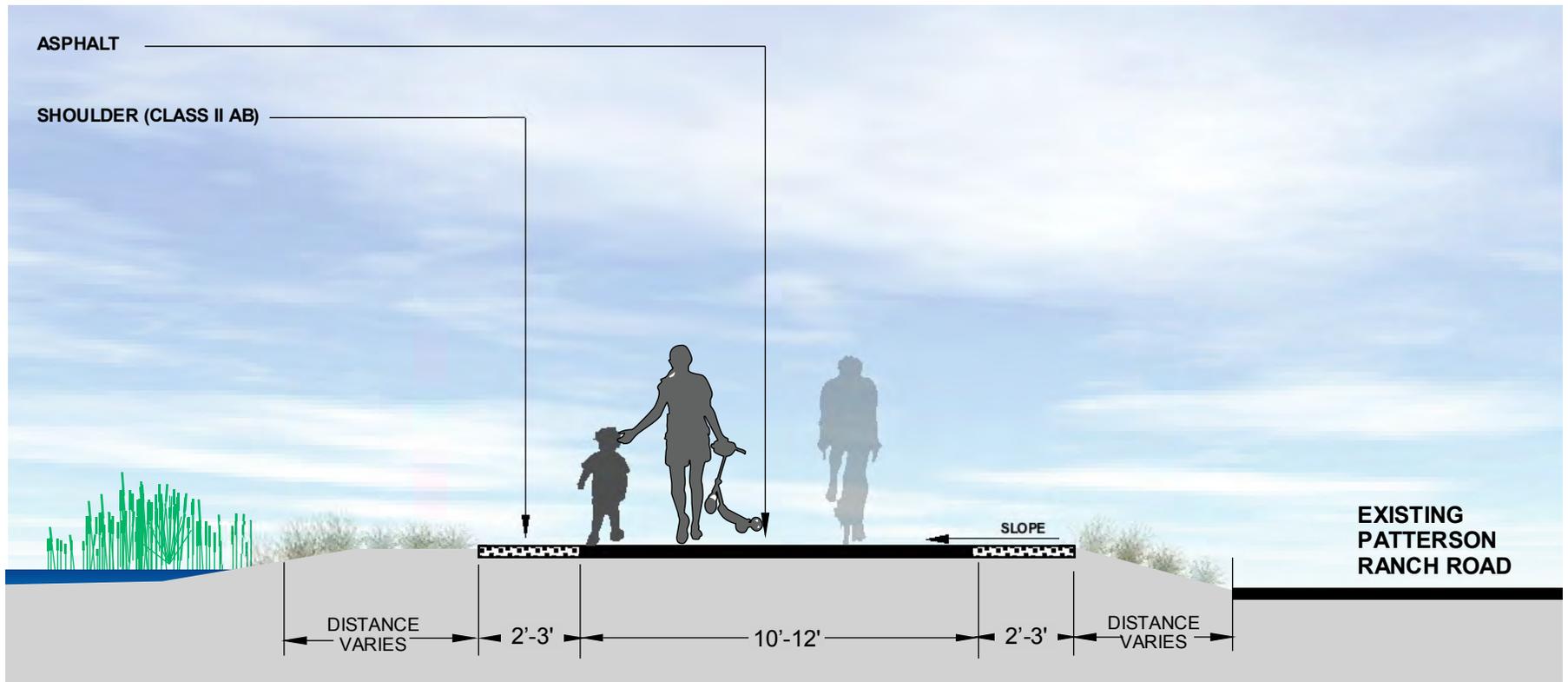


FIGURE 7A
SECTION: MULTI-USE BICYCLE AND HIKING TRAIL

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

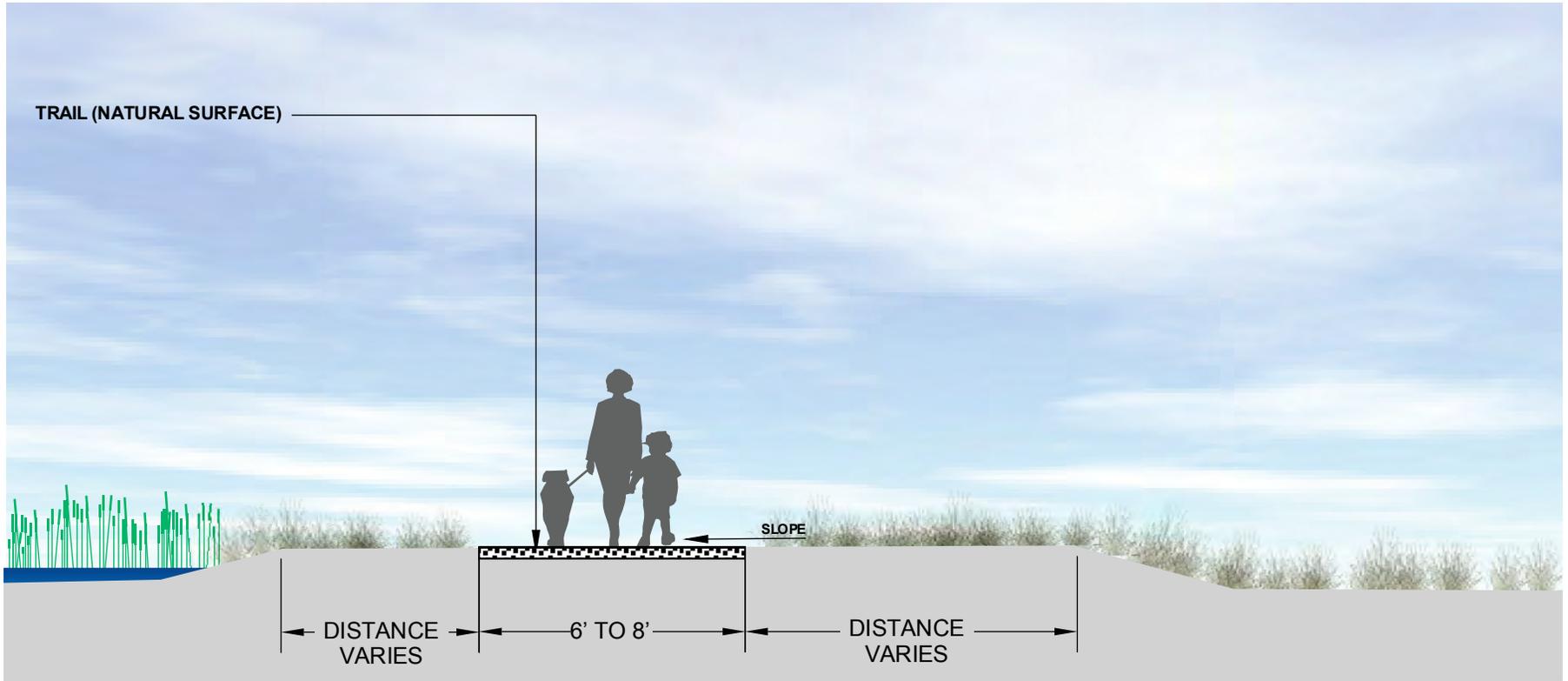


FIGURE 7B

SECTION: HIKING TRAIL

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

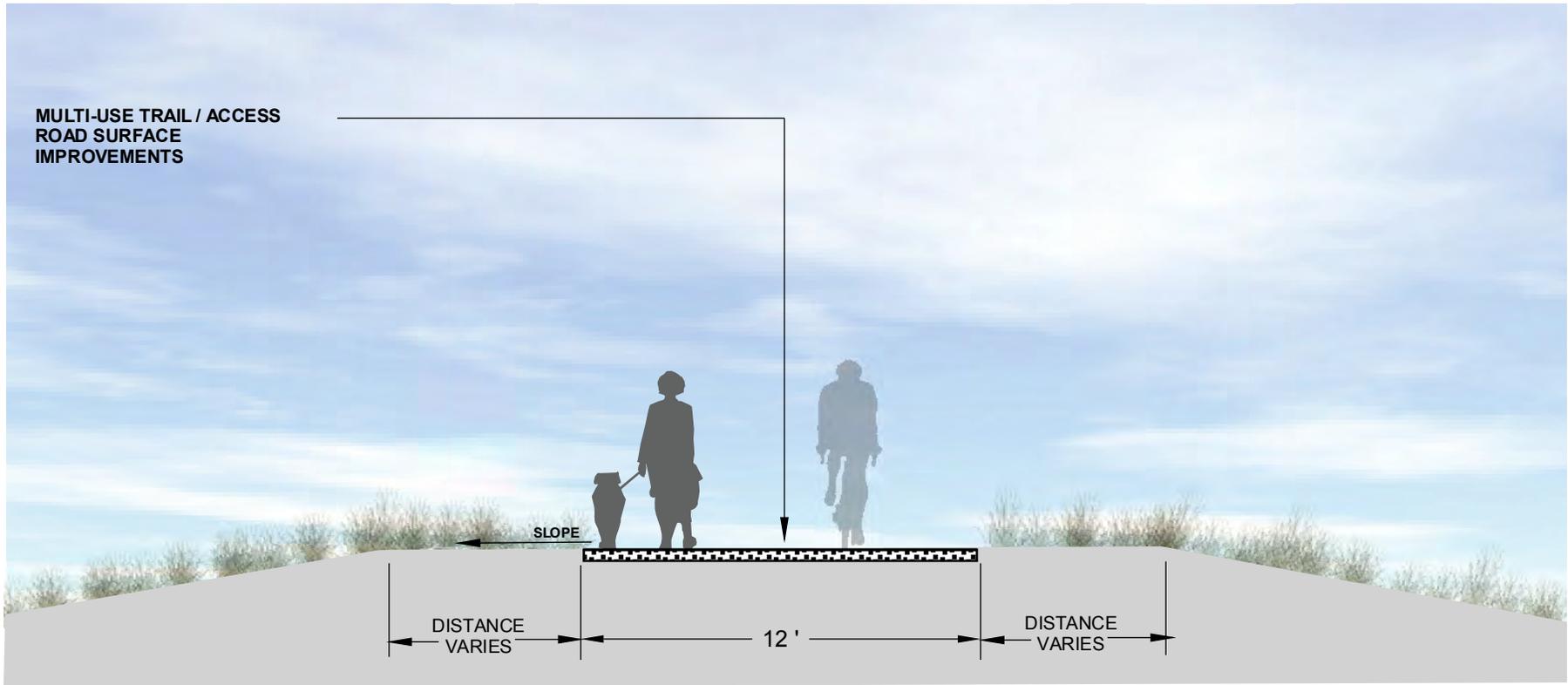


FIGURE 7C
SECTION: SOUTHERN WETLANDS
COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

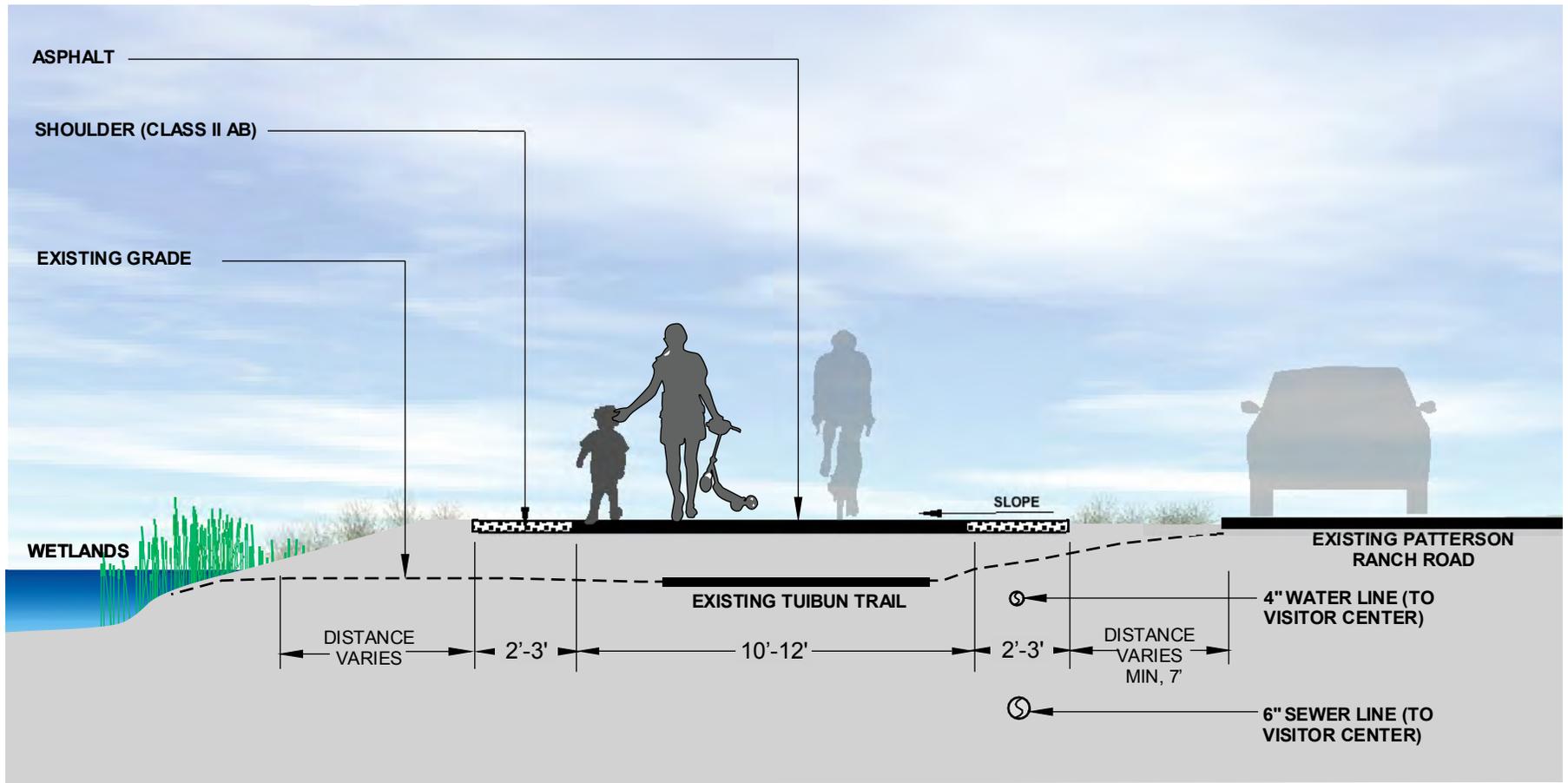


FIGURE 7D

SECTION: TUIBUN TRAIL TO VISITOR CENTER

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

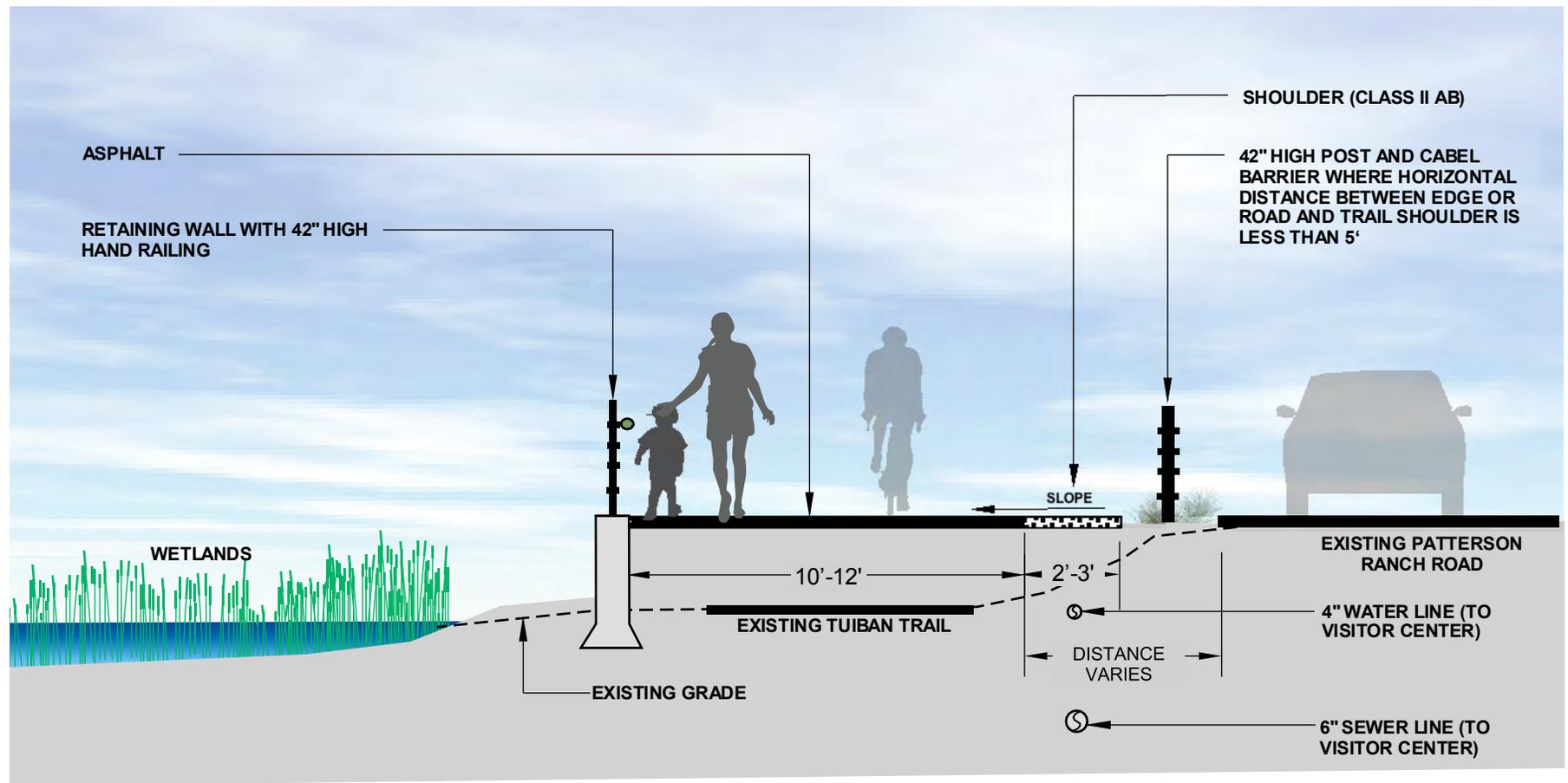


FIGURE 7E
SECTION: TUIBUN TRAIL TO VISITOR CENTER
 COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

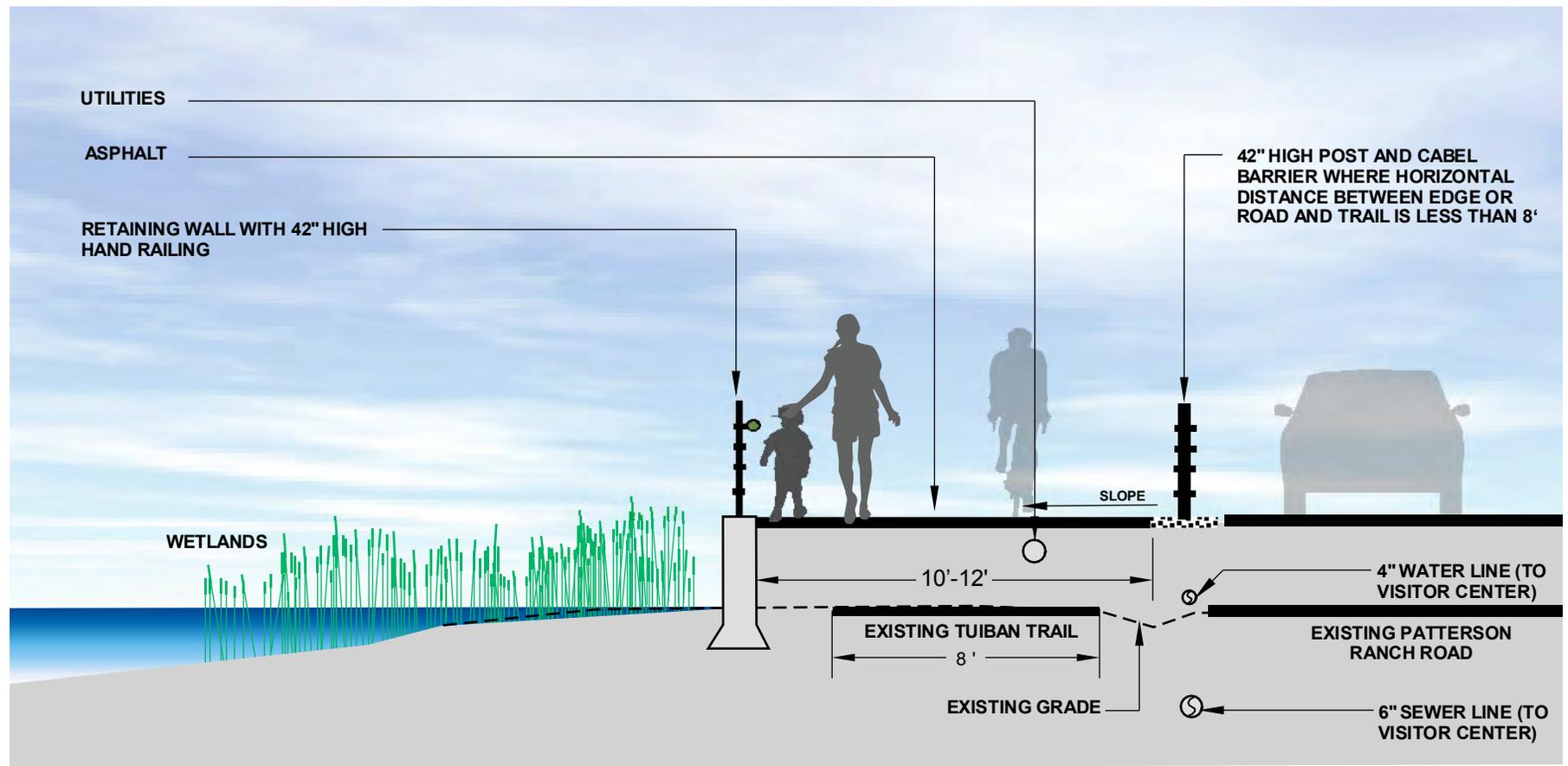
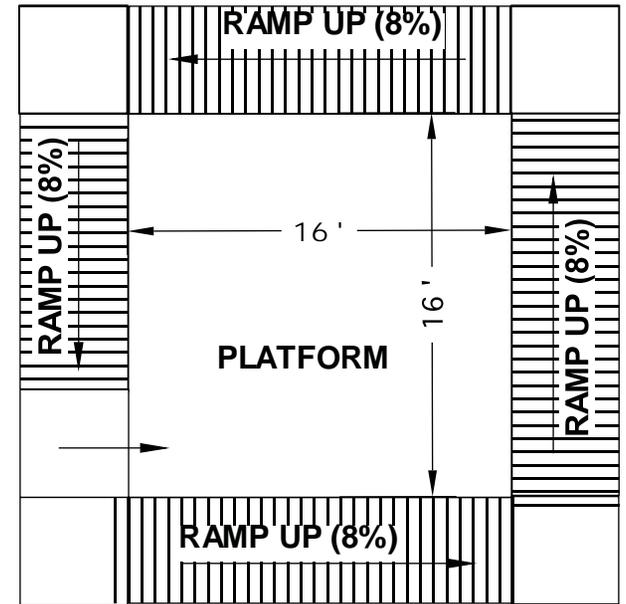
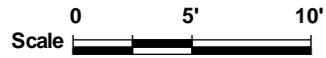


FIGURE 7F
SECTION: TUIBAN TRAIL TO VISITOR CENTER
COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT



ELEVATION



PLAN



FIGURE 8
DRAFT OBSERVATION PLATFORM
COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

Table 4: Trail Summary

Working Trail Name and Key Attributes	Multi-Use Trail (miles)	Foot Trail (miles)
Willows Trail, including minor repair and elevation		0.05 (existing)
Crandall Creek Trail		0.05 (existing)
Oak Trail	0.35	0.2
Patterson Slough Trail	0.30	
Patterson Slough Lookout Trail		0.15
Tuibun Trail	0.40 (relocated)	
Tuibun Visitor Center Trail improvements, including widening and elevation	1.1 (existing)*	
Harvest Way Trail	0.30	
Tule Loop Trail, including connection to new Dumbarton Quarry Regional Recreation Area	1.60	
Ardenwood Creek Connector, including 80' pedestrian/vehicular bridge	0.40	
Tule Lookout Trail	0.30	
Total	3.65*	0.45

* Total does not include 1.1 miles of proposed Tuibun Trail improvement west of the Park Expansion Project Area.

The multi-use trails should be fully improved with a 10-foot to 12-foot paved width, designed for all weather use, fully accessible and compliant with Americans with Disabilities Act (ADA). They could have 2- to 3-foot-wide soft, stabilized fine-aggregate or gravel shoulders on both sides of the pathway. The maintenance access roads in the Southern Wetlands Natural Unit would require minimal public access improvements, such as gravel surfacing, signage, and benches. Bicyclists will be permitted on these multi-use trails. Some sections of the Southern Wetland Natural Unit may be paved with asphalt concrete where regional trail connections pass through the area.

The planned trails include approximately 0.4 miles of new natural surface hiking trails, and approximately 3.5 miles of new multi-use trails. Approximately 1 mile of improvements to the existing Tuibun Trail west of the Project Area, and approximately 0.2 miles of existing foot paths requiring minor maintenance and repair are also included in the Project.

Trail Connections

The proposed trail system includes connections to the San Francisco Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway, a new connection to the existing Crandall Creek Trail (along the south side of the Alameda Creek Flood Control Channel), providing a new bridge between the Crandall Creek Trail and DUST Trail, improving the Tuibun Trail to the Visitor Center and providing a link to camping opportunities at the future Area Dumbarton Quarry Regional Recreation Area (former Dumbarton Quarry), near and west of the southern end of the Project site. The proposed Trail Plan would also facilitate connections to the City of Fremont planned trails, including the Dumbarton Bridge to Quarry Park Trail along Quarry Road, to the south of the Project area. In addition, maintenance access roads in the southern part of the Project Area would be improved to form a loop trail system around the mitigation wetlands and along Ardenwood Creek, with wildlife observation platforms on a spur near the center of this Unit. Portions of Patterson Slough would be accessible to Park staff, researchers, occasional visitors on guided tours, and mosquito and vector control technicians. In addition to habitat restoration, a multi-use trail would be provided on the east side of Patterson Slough, connecting to the Bay Trail along Ardenwood Boulevard. This trail connection would also provide an opportunity to connect to the planned school and community park east of the Expansion area.

The existing Tuibun Trail, currently located on the immediate north side of Patterson Ranch Road, would be relocated to the north side of the new parking lot, and repaved or rebuilt in other areas. Since the Tuibun Trail is sub-standard due to trail width, elevation, and experiences seasonal closure due to flooding/ponding, it would be improved to a consistent standard to facilitate increased all season use to the existing Visitor Center, a distance of about 1.1 miles. Fill placement for trail elevation and upgrading in areas adjacent to wetlands along Patterson Ranch Road and the existing Tuibun Trail would use retaining walls or other structures placed at the edge of the existing trail and backfilling within the wall structures to elevate the trail section (see **Figure 7D, 7E, 7F**). Boardwalk segments may be constructed in some areas. These would be designed to clear-span any low, persistently wet areas within or near the existing trail footprint where trail width and elevation improvements cannot be achieved by use of low retaining walls. Helical piers, pin piers, or other innovative foundation structures would also be used to support any needed boardwalk segments and minimize ground disturbance. Low areas of Patterson Ranch Road that are subject to ponding would also be elevated within the existing roadway footprint, and utility upgrades would be made from Paseo Padre Parkway to the Visitor Center.

Wildlife Observation Platform

Public access features such as wildlife observation platforms (**Figure 8**) or overlooks would be at grade or placed on fill in non-wetland areas, or on elevated decks with ADA compliant ramps. The wildlife observation platforms would use wood or composite materials, be 15 to 25 feet in length and width, and elevated 5 to 8 feet above adjacent grade on surface placed concrete pier blocks or pin piers. This would minimize soil disturbance and potential damage to any below-ground cultural resources. The wildlife observation platforms would be placed a minimum of 30 feet from the edge of Patterson Slough, with installation of fencing and native landscaping to provide physical and visual barriers and screening, in voluntary compliance with the City of Fremont Watercourse (stream) setback protection ordinance.

Alameda Creek Bicycle/Pedestrian Bridge

Currently, the existing San Francisco Bay Trail runs along Union City Boulevard in Union City and crosses Alameda Creek to Fremont via the 550-foot-long Ardenwood Boulevard vehicular bridge, and continues south along Ardenwood Boulevard and Paseo Padre Parkway past the south end of the Park Expansion area. There are currently no designated bicycle lanes on the bridge, with a 5-foot-wide sidewalk on the east side of the bridge. Earthen ramps are provided under the bridge on the north and south ends to allow pedestrian access to the bridge sidewalk from the west side. One alternative for crossing of Alameda Creek and to further improve the Bay Trail and bicycle commuter access that may be constructed as part of the Proposed Project, or by/or in cooperation with another local government entity, is retrofitting the existing bridge with a cantilevered pedestrian/bicycle lane on its west side. Pending further structural evaluation of the existing bridge, this could be accomplished for instance by attaching the cantilever beams and other structures to the existing bridge piers, with no new in-channel or channel bottom fill structures requiring placement of new piers within Waters of the US, or wetland areas. The bottom of the cantilever structure would match the bottom cord elevation of the existing bridge to avoid flood flow obstruction. In addition to the cantilever bridge structure, approach ramps and modifications to the existing Alameda Creek channel levee top and Crandall Creek levee system would connect the new cantilever bridge pathway to the existing westbound and eastbound Alameda Creek Trail and the Bay Trail. As noted above, the Alameda Creek Trail in this area ramps down and under the Ardenwood Boulevard Bridge, and the new trail ramp structures would be designed to accommodate this route, including on the north side and on the south side, where the existing levee top is lower in elevation.

4. Cultural Resources Management

Construction of public access and visitor-serving facilities would be designed to minimize excavation to the first several inches associated with clearing and grubbing activities. Most facilities, such as the parking lot, restrooms, and multi-use trails would involve fill importation and placement in non-wetland areas, not excavation. Elevated structures, such as observation platforms, wall footings, and short boardwalk segments along the improved Tuibun Trail would be founded on concrete foundation blocks or pin piers to minimize site and subsurface disturbance.

Trenching for new utility installation and utility up-roads to the Visitor Center, would be to a typical depth of 3 to 4 feet, and a maximum depth of 6 to 7 feet. Most utilities would be located within existing roadway fill. Shallow 1- to

2-foot depressions would be excavated to create seasonal wetlands. Work involving excavation that could potentially impact cultural resources would be carefully conducted under the observation of a qualified Cultural Resources Monitor and, where needed, a representative of the Ohlone people, to avoid or minimize possible disturbance of buried cultural resources, and to initiate appropriate management actions if buried artifacts or human remains are uncovered.

There are two structures within the Project area that are eligible for listing on the California Register of Historic Structures: 1) the Farm Labor Contractors Residence located immediately adjacent to the upper portion of Patterson Slough, and 2) the Milk House building in the Patterson Ranch Farm Yard area, southwest of the intersection of Patterson Ranch Road and Paseo Padre Parkway. (Please see **Park Development Plan, Figures 3A and 3B** for historic building locations).

The Farm Labor Contractors Residence is in overall fair to poor condition. The framing and foundation are in fair condition, but the exterior siding, roofing, flooring, windows, doors, interior walls and fixtures are in poor to very poor condition. Removal of the Farm Labor Contractors Residence is proposed because it is located immediately adjacent to willow-lined upper Patterson Slough in an area of high biological and cultural resources sensitivity. Because restoring and rehabilitating, or moving the building by elevating it on blocks and wheels (to relocate it) may result in damages to these resources, this structure would be carefully dismantled and materials salvaged to be available for reuse as an interpretive exhibit, farm stand or other display that reflects the structure's historic context.

The Milk House building is in overall good condition and would be preserved in place. The Milk House building is being considered over a longer period for architectural restoration or adaptive re-use such as a possible farm produce stand or other compatible Park supporting uses. In the interim it would be protected from deterioration and weather damage as part of this Project. For architectural restoration or adaptive re-use, improvements would consist primarily of interior renovation, but also would include installation of utilities such as electricity and domestic water. Improvements to historic buildings would be made consistent with the U.S. Department of the Interior, National Park Service *Historic Preservation Standards and Guidelines*. Farm Yard area improvements in this culturally resource-sensitive area would include 1 to 2 feet of fill placement needed for constructing an approximately 20-car parking area for Farm Stand visitors, fencing with driven fence posts to separate the Milk House from the storage and shop buildings that would continue to be used by the Farm operator and Park District maintenance staff, and landscape and entry area improvements, and a new Park Entry sign. All of these construction activities would have a Cultural Resource Monitor present.

5. Agricultural Land Uses and Associated Activities

The historic Patterson Ranch farm fields south of Patterson Ranch Road and immediately west of Paseo Padre Parkway would continue to be used for agriculture, and are designated as the Historic Patterson Ranch Farm and Farm Yard Agricultural Unit in the LUPA. Small-scale and local agricultural crop production by a Farm lessee would focus on use of Climate Smart farming practices and may provide local organic produce for sale at the historic Farm Yard. Climate Smart agriculture includes actions such as addition of compost to fields to facilitate carbon sequestration, low levels of tillage, and careful and efficient management of crop residues, fertilizers, organic pesticides, and irrigation water. Some of these uses may be conducted as part of a demonstration or pilot study with an environmental education/interpretive component.

In addition to farming in the Agricultural Unit, mowing for hay production and grazing would be allowable uses in the Patterson Slough, oak savanna and grasslands and the Western Wetlands areas; but not within seasonal wetlands, willow sausal or mixed riparian forest areas.

Two modern metal storage buildings would remain onsite and would continue to be used for supporting agricultural or Park operation-related activities. Other farm use-related improvements proposed for this area may include extension of utilities to serve the complex, including a new 1" domestic water line to serve the building, sewer, electricity/gas, and construction of a 20-vehicle parking area occupying about 1/3 acre of land, to serve the Farm Stand. Existing fencing may be modified to improve site management and security and enhance the visual charac-

ter of the area. New deer fencing would also be installed in the agricultural area to minimize deer browse damage.

6. Surface Water and Groundwater Management

As an important element of the Project, the Park District would continue to coordinate and cooperate with its partner local agencies in protecting, monitoring, and managing the surface water and groundwater resources within Coyote Hills Regional Park, including within the Park Expansion area. The partner agencies and areas of cooperative and shared water management responsibility include:

- Alameda County Flood Control and Water Conservation District (ACFCWCD) – Flood control and water quality management of Line P/Ardenwood Creek and Line K/Crandall Creek
- Alameda County Water District (ACWD) – Groundwater management, including monitoring and management of shallow zone salinity, and agricultural and habitat restoration irrigation wells
- Alameda County Mosquito Abatement District (ACMAD) – Management of mosquitoes and other potential disease vectors in ponded areas, especially along and within Patterson Slough and west of the Project area
- Alameda County Environmental Health (ACEH) – Water quality of domestic water wells and onsite wastewater disposal systems regulation
- Alameda County Resource Management District (ARCD) – Assistance in management of agricultural operations, including soil and water quality issues associated with farming, grazing, and habitat restoration
- City of Fremont (City) Department of Engineering and Planning – Management of stormwater runoff, grading and erosion control, hazardous materials/waste management, and flood plain regulation

General Project activities include facilitation of access to surface water bodies for monitoring and management, as well as providing continuing access to monitoring wells and irrigation wells, and sharing monitoring information collected by the Park District Staff.

Specific Project activities described in more detail below include:

- ACFCWCD Phase 1 Flood Control and Wetlands Mitigation Area (WMA) Project
- Stormwater control facilities, including parking lot bioswales and rain gardens
- Abandoned well location and destruction
- Abandoned septic tank location and destruction
- Low level pesticide residue evaluation and as-needed remediation and removal

Southern Wetlands Natural Unit-Phase 1 Flood Control and Wetland Mitigation Project

The ACFCWCD Project includes constructing a Flood Control and Wetlands/Habitat Mitigation and Public Access component covering approximately 50 acres that is located south of Line P/Ardenwood Creek, within the Southern Wetlands Natural Unit.

The Park District will continue to coordinate this work with ACFCWCD, who would be the lead agency responsible for this construction and operation. This work is a continuation of Phase I of the ACFCWCD Flood Control Zone 5 Line P Project. The Line P Phase 1 Project was completed in the fall of 2017 and involved making channel flood flow conveyance improvements (channel widening and deepening to original design grades) to Ardenwood Creek, from upstream beginning at Tupelo Street to approximately 2,200 feet downstream of Paseo Padre Parkway west of the Park Expansion area. Phase 2 of the Project involves making channel conveyance improvements along Line P through the existing Coyote Hills Regional Park “J-Pond” area, to its outlet at the tide gate discharge culverts in the Alameda Creek south levee, north of the Visitor Center. Phase 2 is a separate project and is not addressed in this CEQA document.

The Phase I continuation work involves grading two, 3- to 4-foot-deep off-channel basins that will be connected to Ardenwood Creek via two culvert crossing structures for inlet and outlet flow controls. Each crossing consists of four 48" diameter reinforced concrete pipes, with sluice gate control at one of the four pipe barrels at the outlet structure. The two basins will occupy about 30 acres, as measured at their rim elevations. The basins will serve as temporary floodwater detention structures during periods of high flow in Line P/Ardenwood Creek.

The basins will be planted and seeded using a mix of native seasonal wetlands and emergent marsh species, including species that are saline-alkali tolerant. The created wetlands will provide mitigation credits for other ACFCWCD flood control and channel maintenance projects and operations in Zone 5, including maintenance projects along Alameda Creek. Some of the graded earthen material will be relocated within the 50-acre parcel to create oak savanna uplands, with a riparian planting zone along Ardenwood Creek, and to create elevated areas for flood control/maintenance roads. Some of the excess cut not used on site may be off-hauled to an approved disposal location. The Flood Control and Wetlands Habitat Mitigation project is shown conceptually on **Figures 3A and 3B, Park Development Plan**.

The maintenance roads would be available to the Park District and ACFCWCD to improve, maintain, and operate as multi-use trails. This mitigation area would be improved and maintained over an initial 7- to 10-year period, during which it will be operated and managed by the ACFCWCD as a Wetlands / Habitat Mitigation Bank. Following successful establishment of the Mitigation Bank, including its created wetlands and enhanced habitat, and its demonstrated success in being self-sustaining and meeting all Mitigation Bank establishment criteria, and after all the Mitigation Bank credits have been used, the area would be turned back over to the Park District for full integration and management as part of Coyote Hills Regional Park.

Project Area Stormwater Control Facilities

Construction of the Open Use area and 100-car parking lot, restroom, and picnic area facilities in the Ranch Road Recreation Unit would also include the grading of bioswales (broad-bottomed shallow and vegetated drainageways) and rain garden facilities to capture and treat stormwater runoff prior to release to the west side of the Patterson Slough mixed riparian/willow restoration area. Grading volumes are estimated to be 200 to 300 cubic yards of earthwork with maximum cut depths of 2 feet below existing grade. All stormwater runoff design and construction work would be completed consistent with City of Fremont Municipal Code section 18.210.110, "Development design requirements (stormwater)".

Destruction of Abandoned Wells

There are eight known or suspected abandoned and non-functioning wells within the Park Expansion area, or immediately adjacent to it. Some of the abandoned wells have no surface infrastructure, such as a standpipe or pump, and are difficult to locate in the field. Their approximate locations are based on ACWD records. As part of final engineering, and during construction and associated construction management, the Park District would coordinate with ACWD to confirm the location of abandoned wells, identify any previously unknown abandoned wells, and develop and implement plans to destroy these abandoned wells following applicable ACWD permitting regulations and destruction guidelines. This would involve pulling well pumps and casings and any aboveground standpipes and grouting the wells closed.

Abandon and Destroy Septic Tanks and Leachfields

The historic Contractors Farm House and the now demolished Farm Labor Housing buildings were located in rural, unincorporated Alameda County when they were built. They had septic tanks and leachfield wastewater disposal systems. Per Alameda County Onsite Wastewater Treatment System Code, Section 9, these abandoned systems would be field-located, and if found, destroyed. This would involve removing the septic tank lid, pumping the tank chambers, perforating the tank bottom, and backfilling the tank with pea gravel or drain rock and topsoiling. Leach lines would not be removed. This work would be done under a County-issued permit.

Low-Level Residual Pesticide Contaminated Soil Remediation

Portions of the Project Area may contain surface soils with low levels of residual pesticide compounds, which are a

relic from when this area was intensively farmed. Based on the results of previous testing, residual levels are such that they do not create a health risk to construction workers, Park staff, Park visitors, or nearby businesses or residences, but could have potential ecological food chain effects through uptake of soil-borne insects in wetland areas. Follow-up sampling and testing would be completed in areas where new seasonal wetlands are proposed. Depending on the findings, shallow soil excavation and removal, and transport of the soil to an approved facility permitted to accept the soil would be completed. The removed soil may be treated as a non-regulated or non-hazardous waste material.

7. Utility Upgrades and Extension

Domestic Water

Currently there is no potable water service to the Project Area. The Visitor Center is served via a 3-inch water line that crosses diagonally from Paseo Padre Parkway in the vicinity of Kaiser Avenue through the fields north of Ardenwood Creek to Patterson Ranch Road in the vicinity of the existing kiosk where it runs up the road to the Center. This system is considered unreliable and under-sized, especially for fire control purposes. The Proposed Project would include a new 6-inch water line from the ACWD water main along Paseo Padre Parkway, up the north side of Patterson Ranch Road, to the Visitor Center, a distance of about 8,000 linear feet (LF). A new 2-inch lateral water line would run to a proposed new restroom facility to the north, and to the proposed picnic area, a distance of about 1,500 to 1,600 LF from the Paseo Padre Boulevard point of connection.

A new 2-inch potable water line would also be installed within the Farm Yard parking area to serve the existing Milk House building, about 500 - 600 LF. The water lines would be in 2 to -3-foot wide by 3- to 4-foot-deep utility trenches compliant with City of Fremont and ACWD standards.

Irrigation Water

Temporary irrigation, including provision of a temporary irrigation water source and supply, storage, and irrigation distribution system, would be provided as part of the Project to aid in the establishment of native trees and shrubs within the mixed riparian and oak savanna restoration areas. Approximately 6,000 to 8,000 trees may be planted over a three- to five-year period, including live willow stake planting in the willow sausal restoration area. The planted native trees would require seasonal irrigation during a two- to three-year plant establishment period. Total annual irrigation volumes are estimated to be about 3.0 to 4.0 acre-feet of water. Tree planting would be staggered over a 3-year period, so actual annual use may be less than this.

Sources of irrigation water that might be used include either the existing farm irrigation well in the Historic Patterson Ranch Farm and Farm Yard Agricultural Unit and/or repairing and using an existing well located in northeast corner of the Patterson Slough Natural Unit, or using available reclaimed or domestic water.

Wastewater

The current wastewater system consists of a 4-inch diameter sanitary sewer force main that runs about 8,000 feet along Patterson Ranch Road from the Union Sanitary District (USD) sewer main along Paseo Padre Parkway to the Coyote Hills Regional Park Visitor Center. The wastewater system includes a lift station that is located below the Visitor Center. This wastewater system would be reconstructed within Patterson Ranch Road, upgrading to a 6-inch line with a new pump station.

A new, 2- or 3-inch diameter pressurized wastewater pipeline would be installed parallel and adjacent to the reconstructed force main to serve the restroom building in the Project Area. This is a distance of about 1,400 - 1,500 LF from the USD Paseo Padre Parkway sanitary sewer main. The restroom wastewater system would include a duplex (backup) pump station. The sewer line would also be located within a utility trench compliant with City of Fremont and applicable USD codes and standards, typically 3 feet wide and 5 feet deep along much of Patterson Ranch Road, but possibly up to 6 or 7 feet in depth near Paseo Padre Boulevard. Since the Park Expansion area is not currently within the USD service area, approval would also be needed from the Alameda County Local Agency Formation Commission (LAFCO).

Other Utilities

Other “dry” utilities that would be installed within and above the water line in the joint trench per City code would include: a) 2” gas line, b) two 4” telecommunications conduits, c) 4” electrical conduit, and d) 2” fire signal conduit. These would also run from the vicinity of Paseo Padre to the Visitor Center, with select laterals (electric service) to the proposed restroom facility.

8. Climate Change and Sea Level Rise Adaptation

There are four objectives that would be implemented in the LUPA and Park Development Plan regarding climate change adaptation:

- 1) Ensuring that existing and proposed improvements are resilient to changing climate, including sea level rise, rising ground water tables, potential soil and groundwater salinization, and increased flood risk to infrastructure.
- 2) Ensuring that District activities occurring within the expansion plan area, consistent with the overall Coyote Hills Regional Park, are appropriate management actions to reduce Park contributions of greenhouse gases and other climate changing actions, and proactively taking actions that trap or sequester atmospheric carbon.
- 3) Providing opportunities to educate Park visitors about climate change, as well as cooperating with climate change scientists to make parklands available for research and demonstration projects.
- 4) Providing opportunities for active transportation to, from and within the Park by constructing facilities for bicycle and pedestrian use, as well as accommodating transit where appropriate.

Site program components that address climate adaptation include Climate Smart farming activities, as well as the proposed program of riparian and oak savanna tree planting for carbon fixing or carbon sequestration. Other opportunities include planning for installation of electric vehicle charging stations in the parking lot, should the Park District develop a pilot program in the future.

Climate Smart management and adaption also involves constructing facilities and improvements to elevations above those subject to flooding and ponding, as well as developing improvement and restoration plans that are cognizant of and adaptive to expected increases in shallow zone groundwater levels, increased areas of ponding/flooding and poor drainage, and potentially increased soil and water salinity and sodium levels. The plant palette would include local, native plant species that are site appropriate and tolerant plant materials capable of thriving under changing site conditions.

A proposed robust, science-based soil and surface and groundwater monitoring program would aid in climate change adaptive management decision-making. Baseline conditions were documented during the Project site investigations and would form the basis of the proposed long-term monitoring program. Smart, wireless and web-based agricultural sensors may be used to remotely monitor organic matter (soil carbon), moisture, soil oxygen, salinity, pH, and other important soil and hydrologic properties, and the record keeping and database would provide the information needed to support adaptive management decision-making.

9. Visitor-serving Facilities and Trail Grading and Disturbance

Preliminary estimates of grading, trenching and fill quantities are provided in this section. Quantities and measurements are approximate. Exact Visitor-Serving facility footprints and exact trail lengths, widths, and fill depths would be determined during future Park Design Development with some Plan elements, such as building, grading, and stormwater management, subject to review and approval by the City of Fremont. A range of lengths, widths and fill thickness was used to bracket and quantify potential disturbance areas associated with Proposed Project features, along with a range of expected fill volumes.

Construction of trails, parking areas, and visitor facilities, and installation or upgrading of utilities, would involve

clearing and grubbing 2 to 3 inches of topsoil, grading, trenching and local cut or imported fill placement and compaction. Fill depths would typically not exceed 4 feet with most cuts (except utility trenches) limited to 2 feet.

Construction of visitor-serving facilities (farm yard area, picnic area, restrooms, and parking) would disturb between 141,000 and 171,000 square feet, and place between approximately 6,200 (0.15 acres) and 12,500 (0.30 acres) cubic yards of fill to a maximum depth of 4 feet. Construction of new trails and repair, re-construction, or relocation of existing trails would disturb between approximately 310,900 and 366,600 square feet (7.1 to 8.4 acres), and place between 13,000 and 20,400 cubic yards of fill to a maximum depth of 3.0 feet. Trenches for utility installation would be approximately 9,000 to 9,800 feet in length, and have a maximum depth of 6-feet. For the Project, total fill volume associated with parking, trails and visitor-serving facilities would be in the range of about 19,500 to 33,000 cubic yards. Total disturbance, if all Project Trail and Visitor-serving features were constructed at the same time, would be between approximately 452,000 sq. ft. (10.3 acres) and 537,600 sq. ft. (12.3 acres). **Tables 5 and 6** summarize fill and disturbance associated with Trails and Visitor-serving Facilities.

Table 5: Visitor Serving Facilities -Disturbance and Fill Summary

Working Area Name	Feature Size (SF)	Fill Depth (ft.)	Fill Volume (CY)
1. Parking Area and Restroom	48,000 - 62,000	1.5-2.5	2,700-5,700
2. Picnic Area	18,000 - 23,000	1.0-2.0	700-1,700
3. Overflow Parking	43,000 -47,000	1.0-2.0	1,600-3,500
4. Farm Yard Parking and Road	23,000 -27,000	1.0-1.5	850-1,500
5. Other Farm Yard Use Areas	9,000 - 12,000	1.0-1.5	350--670
Total	141,000-171,000	N/A	6,200-12,500-

Table 6: Trail Disturbance and Fill Volumes

Working Trail Name	A Trail Length (LF)	B Fill Width (ft.)	C Fill Depth (ft.)	D Fill Disturb- ance (SF)	E Fill Vol- ume (CY)
Willows Trail (existing foot) ^{*1}	600	7-8	0.4-.5	4,200-4,800	60-90
Crandall Creek Trail (existing foot tail with 20' bridge) ^{*1}	500	7-8	0.3-.4	3,500-4,000	40-60
Crandall Creek Trail Connector (existing foot)	1,100	11-12	1.5-2.0	12,000-13,200	680-980
Oak Trail and Patterson Slough Trail (multi-use)	2,700-2,900	17-19	1.5-2.0	46,000-55,100	2,600-4,000
Patterson Slough Overlook Spur (existing foot)	600	9-10	1.0-1.5	5,400-7,000	200-390
Patterson Slough West Spur (existing foot)	500	9-10	0.5-0.7	4,500-6,000	85-155
Tuibun Trail (relocated - multi-use) ^{*2}	2,000-2,200	17-19	2.0-2.5	35,000-40,000	2,600-3,700
Tuibun to Visitor Center Trail improvements (improved - multi-use) ^{*3}	5,300-5,500	9-10	1.5-2.0	53,000-66,000	2,950-4,900
Harvest Way Trail (multi-use)	1,600-1,800	17-19	2.5-3.0	27,200-34,200	2,500-3,800
Marsh View Loop Trail (multi-use) ^{*4}	8,500-8,900	11-12	0.3-0.4	93,500-108,000	1,050-1,600
Ardenwood Creek Connector (multi-use) ^{*4}	2,000-2,200	11-12	0.3-0.4	22,000-26,400	250-390
Tule Spur (multi-use) ^{*4}	1,600-1,800	11-12	0.3-0.4	17,600-21,600	200-320
Total	27,000-28,600	N/A	N/A	310,900-366,600	13,215-20,385
Notes:					
*1) Minor improvements to existing foot trail, including re-grading and gravel surfacing in places					
*2) Existing Tuibun Trail along Patterson Ranch Road to be relocated to the north within LUPA					
*3) Existing Tuibun Trail West to be elevated approximately 1.5 feet to 2.5 feet using fill placed between retaining walls with some boardwalk structures					
*4) Trails in Southern Wetlands to be located on Flood Control District constructed maintenance access roads. Signage and minor gravel surfacing may be required.					

Restoration Grading and Disturbance

Grasslands and Oak Savanna

To facilitate the control of existing invasive weedy areas and the establishment of native grasses and forbs, and to create a more complex micro-topography for habitat diversity, oak savanna and grassland restoration would include the selective placement of 6 inches to 1 foot of clean imported soil, and 2 to 3 inches of compost. The compost addition will also facilitate carbon sequestration. Because of the large size of these restoration areas, clean soil and compost importation and placement would initially be limited to zones or strips along the Fremont Unified School District future school parcel and the City of Fremont future park parcel, paralleling Ardenwood Boulevard, as well as along the north side of the proposed parking lot, open use area, and picnic and landscaped areas, paralleling Patterson Ranch Road. The zone where imported fill/compost would initially be placed parallels Ardenwood

Boulevard from approximately 250 to 700 feet wide and 2,000 to 2,500 feet long. Proposed imported clean fill in this area would range from 15,000 to 20,000 cubic yards, with proposed compost additions ranging from 8,000 to 10,000 cubic yards. The zone paralleling Patterson Ranch Road ranges in size from a width of 200 to 400 feet, and a length of 1,000 to 1,500 feet. Initial imported clean fill in this area would range from 8,000 to 10,000 cubic yards, with proposed compost additions ranging from 4,000 to 5,000 cubic yards.

The proposed grassland/oak savanna restoration work also includes selectively scraping or removing 2 or 3 inches of weed-seed laden topsoil and placement under the proposed parking lot and open use area (up to 20,000 cubic yards), and importing and placing 6 inches to 1 foot of clean suitable fill/topsoil and 2 to 3 inches of compost over the existing soil surface in grassland/oak savanna restoration areas to reduce weed competition. Total imported fill/topsoil volume is estimated to range from 30,000 to 50,000 cubic yards. Compost addition to oak savanna areas is estimated to range from 15,000 to 25,000 cubic yards.

Seasonal Wetlands

Seasonal wetlands enhancement achieved by shallow (1 to 2 feet deep) excavation is proposed to occur in two areas near the east and west ends of Patterson Slough within the Patterson Slough Natural Unit, as well as within the Western Wetlands Natural Unit. Approximately 3 to 5 acres of seasonal wetland excavation and grading are proposed for these areas, resulting in cut volumes of between 5,000 and 16,000 cubic yards (each area). All seasonal wetlands excavation and creation would occur in areas that have not been identified as being Corps of Engineers Jurisdictional Wetlands. Cut soil volumes from seasonal wetlands enhancement grading would be placed to elevate the open use area, parking lot and picnic/landscape area or placed within the Farm Yard area. Grading for habitat restoration and flood control purposes in the Southern Wetlands Natural Unit was previously discussed under the section heading 6.0 "Surface Water and Groundwater Management".

Because of nearly ideal soils and shallow groundwater conditions, only minimal grading and disturbance would be performed to restore and enhance the willow sausal and mixed riparian forest along Patterson Slough. Invasive weed control in areas of proposed mixed riparian forest and willow sausal would be achieved by mowing, grazing, and selective herbicide application and compost placement, with eventual full control achieved by shading provided by a dense tree canopy.

1.4 Determination

An Initial Study has been prepared under the direction of the East Bay Regional Park District's Planning, Stewardship and GIS Services Department, in which the environmental effects of the proposed project have been evaluated. On the basis of this Initial Study, a copy of which is attached, the Park District has found that the proposed project could have a potentially significant effect on the environment, but at least one effect has been adequately analyzed and addressed by mitigation measures as described in the attached Initial Study. An Environmental Impact Report is required, but it must analyze only the effects that remain to be addressed.

Prepared by: Karla Cuero, Project Coordinator, Environmental Programs

ATTEST:

Karla Cuero
Project Coordinator

Date: _____

2.0 BACKGROUND AND SITE INFORMATION

2.1 Introduction

The East Bay Regional Park District has prepared this Initial Study for the proposed project (described in Section 1.1), pursuant to the California Environmental Quality Act, as amended (Public Resources Code Section 21000 et seq.), and in accordance with the State of California *CEQA Guidelines* (California Code of Regulations Section 15000 et seq.).

The purpose of this Initial Study is to determine whether implementing the Coyote Hills Restoration and Public Access Project at Coyote Hills Regional Park project could result in potentially significant effects to the environment, and, if so, to incorporate mitigation measures to eliminate or reduce the project's potentially significant effects to less-than-significant levels.

As stated in 1.3 Determination, above, on the basis of this Initial Study, a copy of which is attached, the Park District has found that, the proposed project could have a potentially significant effect on the environment, and an Environmental Impact Report is required.

2.2 Project Purpose and Need

The East Bay Regional Park District has developed the recommendations and proposals contained in the Coyote Hills Restoration and Public Access Project Land Use Plan Amendment to protect and appropriately manage natural and cultural resources while providing the public with educational and low-impact, passive recreational opportunities.

2.3 Required Permits and Approvals

It is anticipated that permits and/or project approvals would be required from the following separate agencies:

Federal Agencies

- **U.S. Army Corps of Engineers** – Permits for any earthwork in jurisdictional wetland areas or over Waters of the U.S. Under Section 404 of the Clean Water Act permits would be required for excavation and placement of fill for public access facilities, such as bridges and trail structures. These may be covered under Corps Nationwide Permit 14 – *Linear Transportation Projects*. Revegetation/enhancement of existing seasonal wetlands and riparian areas may be covered under a Corps Nationwide Permit 27 – *Aquatic Habitat Restoration, Establishment, and Enhancement Activities*
- **U.S. Fish & Wildlife Service and National Marine Fisheries Service** – The Corps of Engineers may initiate consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service in accordance with Section 7 of the Endangered Species Act because of activities in wetlands/ waters that are occupied by listed or protected species. The agencies may consult on the potential impacts of the proposed project to Special Status fish and wildlife species and their habitat, and require project specific measures to avoid and minimize impacts, and to provide appropriate compensatory mitigation.

State Agencies

- **Department of Fish and Wildlife** – A Section 1600 Stream or Lakebed Alteration Agreement may be required from the California Department of Fish & Wildlife for activities such as building demolition and restoration planting within or near the Patterson Slough bank top and riparian corridor, as well as for bridge crossings of Ardenwood Creek, near Crandall Creek, and the Alameda Creek cantilever walkway addition. Coordination and consultation with them may also be required for issues associated with potential project impacts on or within habitat areas occupied by protected or listed species covered under the California Endangered Species Act, such as for northern harrier and Black rail., and for any protected

plant species. This would also include development and approval of mitigation or restoration and resource protection plans.

- **San Francisco Bay Regional Water Quality Control Board (RWQCB)** –The project may require Water Quality Certification under Section 401 of the Clean Water Act, Notice of Intent (NOI) for construction activity, and Waste Discharge Requirements (WDRs) pursuant to California’s Porter-Cologne Act if any wetlands or state and federal waters are impacted.

Regional Agencies

- **Bay Area Air Quality Management District** - Construction work involving use of heavy equipment and associated air emissions will require a permit from this agency.

County and Local Agencies

City of Fremont

- In accordance with the City’s General Plan and Zoning Ordinance, parts of the Project may be subject to City approval of a Conditional Use Permit (CUP). A Discretionary Design Review Permit for site improvements (i.e., parking lots, restroom building, picnic area, kiosk, etc.) and Historic Architectural Review for demolition of the Labor Contractor’s Residence and any exterior improvements or modifications to other potentially historic structures, such as the Milk House. The proposed farm stand would be considered an ancillary use to an otherwise permitted agricultural use, but is subject to special provisions contained in Fremont Municipal Code (FMC) Section 18.19.470 (Roadside Stands). The Park District will coordinate with the City to verify applicable permit requirements and some of these requirements may be met by voluntary compliance.
- The Conditional Use Permit and Discretionary Design Review Permit will be subject to the review and approval of the Planning Commission. The Historic Architectural Review will be subject to review and approval of the Historic Architectural Review Board and City Council (for demolition of the potentially historic residence).
- Grading, stormwater management and drainage, and building permits, including CALGreen compliance, will be required for the 20-car and 100-car parking lot, and the restroom. Any bridges over FEMA regulatory flood plains will require review by the City Engineering Department and approval by the City’s Floodplain Manager in the Engineering Department, along with review by ACFCWCD.
- Approval of Project Plans, Encroachment Permits and other construction agreements will be needed from the City for improvements to the Patterson Ranch Road-Paseo Padre Parkway intersection and road improvements such as driveway openings in their ROW.
- Several other City-issued permits and approvals typically issued for a development project after City review of plan and permit application submittals may not be applicable to the Park District, a Special District governed by its enabling legislation. These include the stream course protection permit that regulates development within or near a 20- to 30-foot setback zone from watercourse centerline or bank and landscape permit requirements. The District will coordinate with the City for compliance with applicable standards for this atypical restoration and public access project.

Alameda County Flood Control and Water Conservation District

Project Engineering Plans for all trails and structures on ACFCWCD lands will be subject to review and agreement, including:

- Footbridge at the Crandall Creek Trail connection,
- All trails within the Southern Wetlands Natural Unit,
- Trail and bridge crossing of Ardenwood Creek, and
- Improvements to portions of Patterson Ranch Road, Tuibun Trail modifications, and utility upgrades and extensions to the west of the Project area.

Alameda County Water District

Project work elements that require coordination, permit applications, and approval from ACWD include:

- Location and destruction of abandoned wells in areas affected by project grading activities.
- Construction of any new well, and/or repair of an existing well for temporary use as an irrigation water source for native tree, shrub, and landscape establishment. The existing agricultural well can be repaired or replaced/deepened as part of an independent project.
- Deep piers for bridges and boardwalk structures or wildlife observation platforms that may penetrate near-surface aquifers.
- Permit from ACWD to extend a domestic waterline from Paseo Padre Parkway to the proposed restroom facility and picnic area.

Alameda County Transit District

Coordination with the Alameda County Transit District regarding transit routes in the Project vicinity, and/or adding a new bus stop/bus shelter along Paseo Padre Parkway and near the Park entry.

Alameda County Environmental Health

Permitting and coordination for abandonment and closure of any septic tank and leachfields associated with historic agricultural buildings.

Union Sanitary District

The Expansion Project Area is outside of the Union Sanitary District (USD) Service Area, and the proposed restroom will need to be annexed to the USD as part of an Alameda County Local Agency Formation Commission (LAFCO) application. Permits from USD will be needed for connection to the sanitary sewer main.

Any proposed construction within USD easement or heavy construction traffic over USD force mains (FMs) also requires specific approval from USD. For construction traffic/haul roads, USD will require an Encroachment Permit that may include a specific agreement and temporary improvements to bridge over FMs, such as using steel trench plates.

2.4 Existing Site Conditions

The Project site generally consists of open grassland and poor quality seasonal wetlands adjacent to the Coyote Hills, including active and fallow agricultural fields. Ardenwood Creek (P-Line flood control channel) crosses the southern portion of the property and drains into Pelican Marsh within Coyote Hills Regional Park to the west. Patterson Slough meanders through the property north of Patterson Ranch Road, which bisects the middle of the site, connecting Paseo Padre Parkway and the existing Coyote Hills Regional Park. Trees are concentrated along the sinuous Patterson Slough north of Patterson Ranch Road, and a grove of mature oaks is located near the intersection of Paseo Padre and Patterson Ranch Road.

There are two developed areas within the Project site. North of Patterson Ranch Road there is a small one-story structure known as the Labor Contractors Residence that was formerly used as housing. This structure is located in front of the riparian canopy at Patterson Slough.

The second area is known as the "Oak Tree Produce Complex", located along Paseo Padre Parkway approximately 400 feet south of the intersection with Patterson Ranch Road. It has also been called the "Farm Corporate Yard". This area has an informal gravel parking area, and contains one wood historic structure (Arden Dairy Milk House) and three metal buildings used as farm structures. It is sited on a paved pad that is raised approximately 1-2 feet above the surrounding grade.

The following provides an overview and summary of the environmental setting of the Park Expansion area. A more detailed discussion is provided in the companion document, *Questa's Coyote Hills Restoration and Public Access Project - Existing Conditions and Opportunities and Constraints Report*¹.

With the exception of about 20 acres of recently farmed land located on the southwest side of the Patterson Ranch Road- Paseo Padre Parkway intersection, and the developed approximately four-acre farm corporation yard area, most of the 306 acre project area consists of fallow and weedy fields occur throughout the Park expansion area. Within this area is a 12-acre riparian corridor along Patterson Slough. Scattered seasonal wetland and willow thickets occur along portions of Patterson Ranch Road.

Visual Resources

The Coyote Hills rising above the Bay Plain, as seen from Paseo Padre Parkway, form the most striking and visually important view within the project area. The other prominent visual resource is the willow lined Patterson Slough which provides a continuous naturally appearing and meandering tree canopy feature in the northern portion of the site.

Other visual elements existing at the site include utility poles, transmission lines, and the fenced farm service yard adjacent to Paseo Padre Parkway.

The current Park entry at the Patterson Ranch Road- Paseo Padre Parkway intersection is defined by the gravel parking lot and farm service yard. Most of the farm land and other un-farmed fields are fallow and can take on a weedy and un-kept appearance if not regularly mowed or grazed.

Agriculture

The Park expansion area was farmed for over 150 years, beginning in the late 1850s. Under the terms of a current lease agreement with Perry Farms Inc., about 115 acres of land located both north and south of Patterson Ranch Road are available to be farmed. This area is also within an Agricultural and Open Space Easement (See **Figures 9 and 10**). However, because of the lack of a dependable irrigation water supply north of Patterson Ranch Road, only about 45 acres (south of Patterson Ranch Road) are suitable for farming. About 20 acres of land was farmed in 2016, but the land was fallowed in 2017 and 2018 because of a problem with the irrigation well. This land is farmed using certified organic farming methods. The existing lease with the farm operator expires in December of 2019, but can be renewed. Currently the lease does not specifically cover use of buildings in the Farm Yard area.

Biology

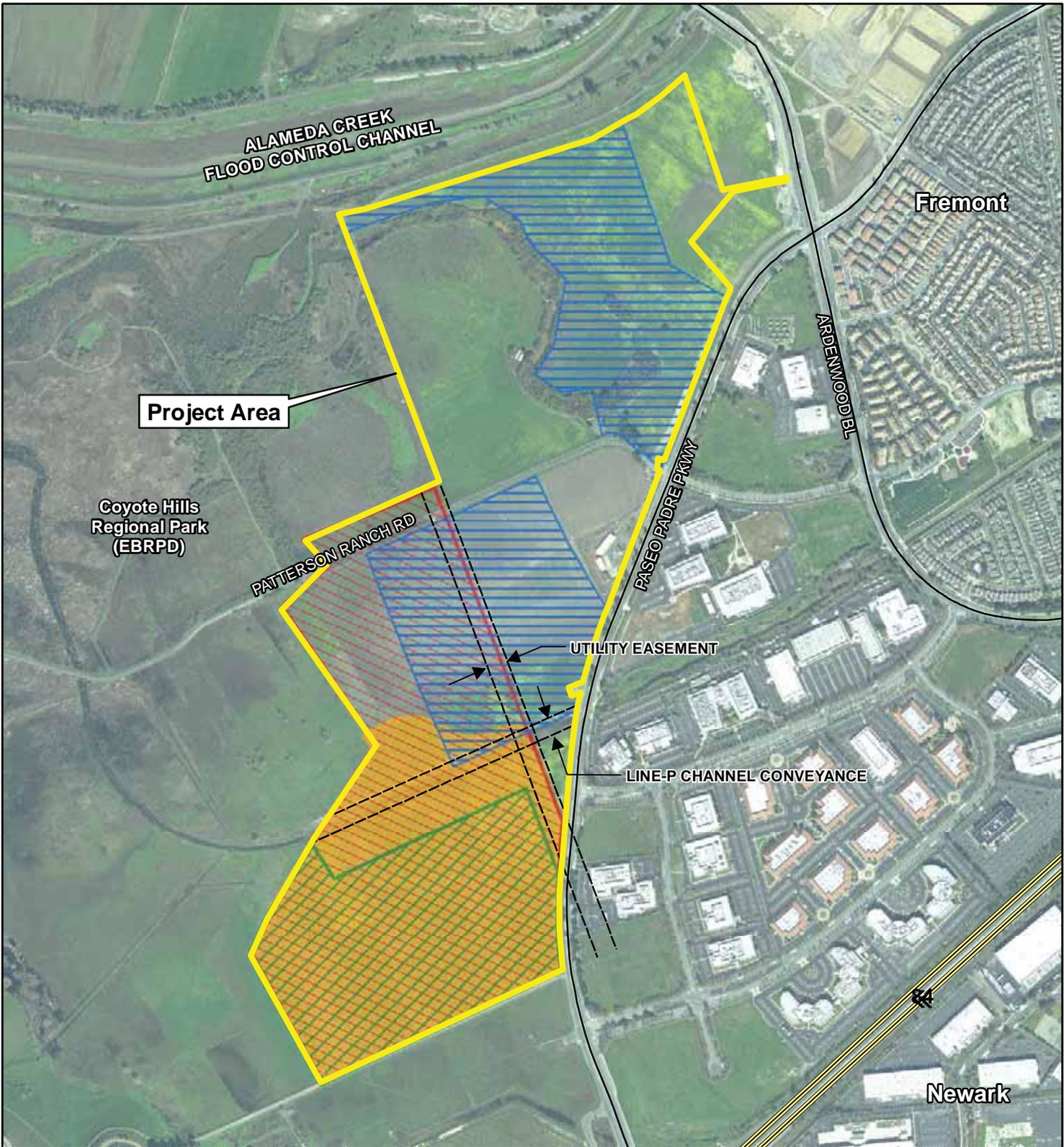
Existing biological resources are discussed in detail in the Project *Existing Conditions and Opportunities and Constraints Report*, with additional information developed for the Project EIR.

Cultural Resources

Known catalogued, and significant Native American (Ohlone people) cultural resources occur within and immediately adjacent to the project area, along with reported and informally mapped, but not catalogued or professionally investigated resources. In addition there is a potential for other presently unknown cultural resources, buried at shallow depths, to occur throughout the project areas, especially within the farm yard area, north of Patterson Ranch Road, and notably in the general vicinity of Patterson Slough.

Two historic buildings occur within the project area, associated with the historical Patterson Ranch farming operations. One is the Ardenwood Milk House Building located in the farm yard area. The other is the Farm Labor Contractors residence, located near the southeast end of Patterson Slough. Both of them are 1930's era buildings. The Milk House building is in good condition while the Farm Labor Contractors building is in fair to poor condition.

¹ Questa Engineering Corporation. *Coyote Hills Restoration and Public Access Project - Existing Conditions and Opportunities and Constraints Report*. September 2018.



Open Space Easement



Easement Corridor



ACFCWCD



Agriculture and Conservation Protected Property



Williamson Act Lands

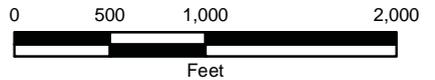
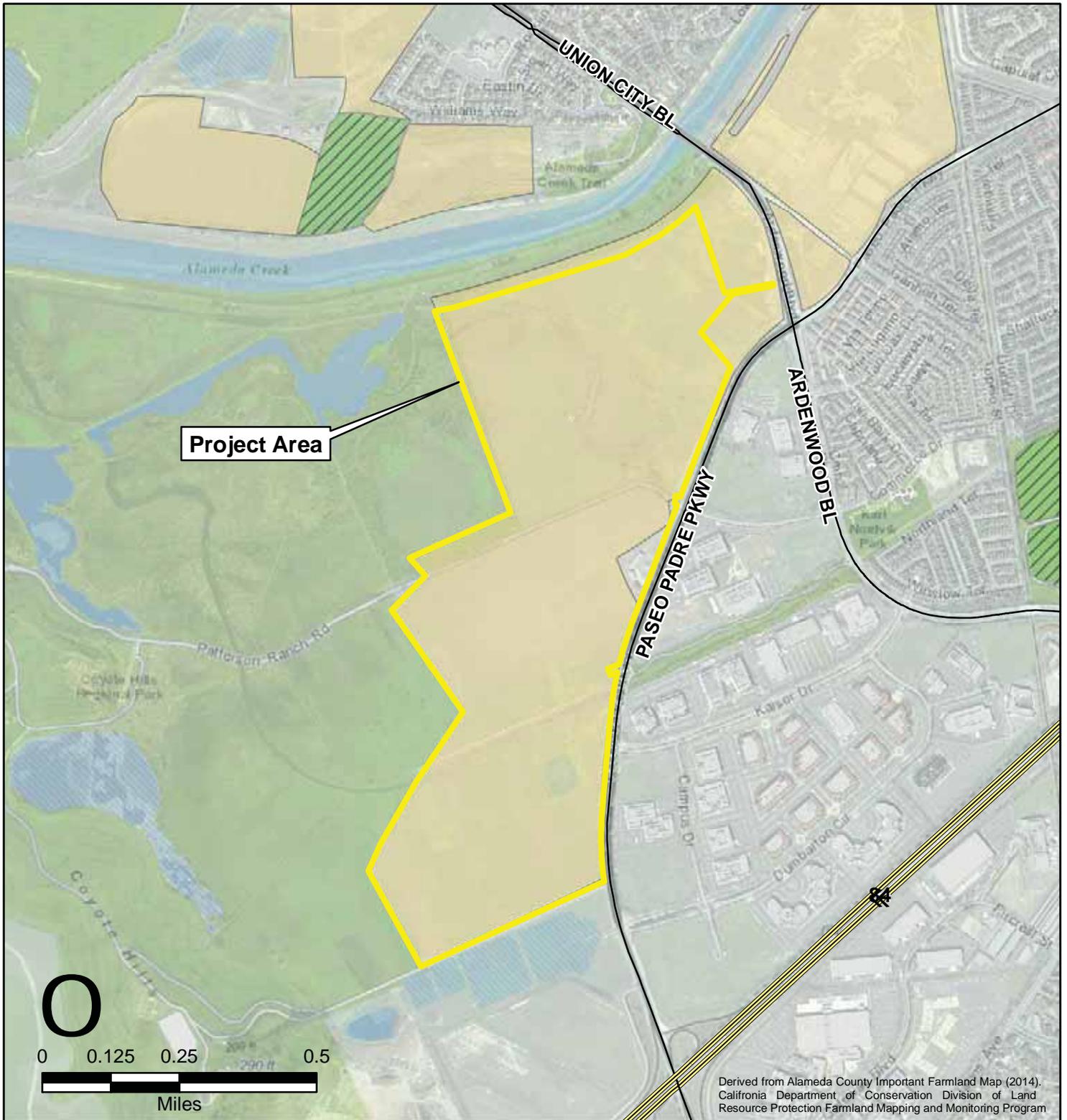


Figure 9



Derived from Alameda County Important Farmland Map (2014).
 California Department of Conservation Division of Land
 Resource Protection Farmland Mapping and Monitoring Program



Prime Farmland:
 Land that has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.



Grazing Land:
 Land on which the existing vegetation is suited to the grazing of livestock

Figure 10

The Land Use Plan Amendment Unit Designations and Plan components recognizes the very high Cultural Resources sensitivity of the Park expansion area, especially the park entry and farm yard area, and the area north of Patterson Ranch Road and along Patterson Slough.

Geology and Soils

The project area is underlain by alluvial deposits, including fine grained flood basin and estuarine deposits south of Patterson Ranch Road and recent stream alluvium to the north (**Figure 11 Geology Map**).

There are no known or recognized active earthquake faults that pass through the project area, although there are several historically active faults that are located nearby (**Figure 12 Fault Map**), including the Hayward Fault located 4 miles to the east and the San Andreas Fault, located 13 miles to the west.

Although there is little or no risk of fault rupture within the Project area, Project area soils are susceptible to liquefaction associated with strong ground motion from activity on regional faults. The design of all structures, including buildings and bridges will require seismic consideration in design. Other geotechnical issues requiring consideration in planning and design include the occurrence of poor drainage and high-groundwater conditions, clayey and expansive soils, and in the southern part of the Project area – corrosive soil conditions that could affect concrete and metal structures, including building foundations, bridge abutments and underground utilities.

The estuarine deposits are strongly saline and alkali (sodium affected) south of Ardenwood Creek where they form the Pescadero soil series. On the west side of the project area they are mapped by the USDA as being Omni strongly saline. (**Figure 13 Soils Map**) Soil studies completed for the LUPA found them to be slightly to moderately saline and alkaline. The majority of the soils were mapped as Omni drained, or non-saline. The best agricultural soils occur along the east side of the project area, on the slightly higher in elevation and better drained, non-saline areas.

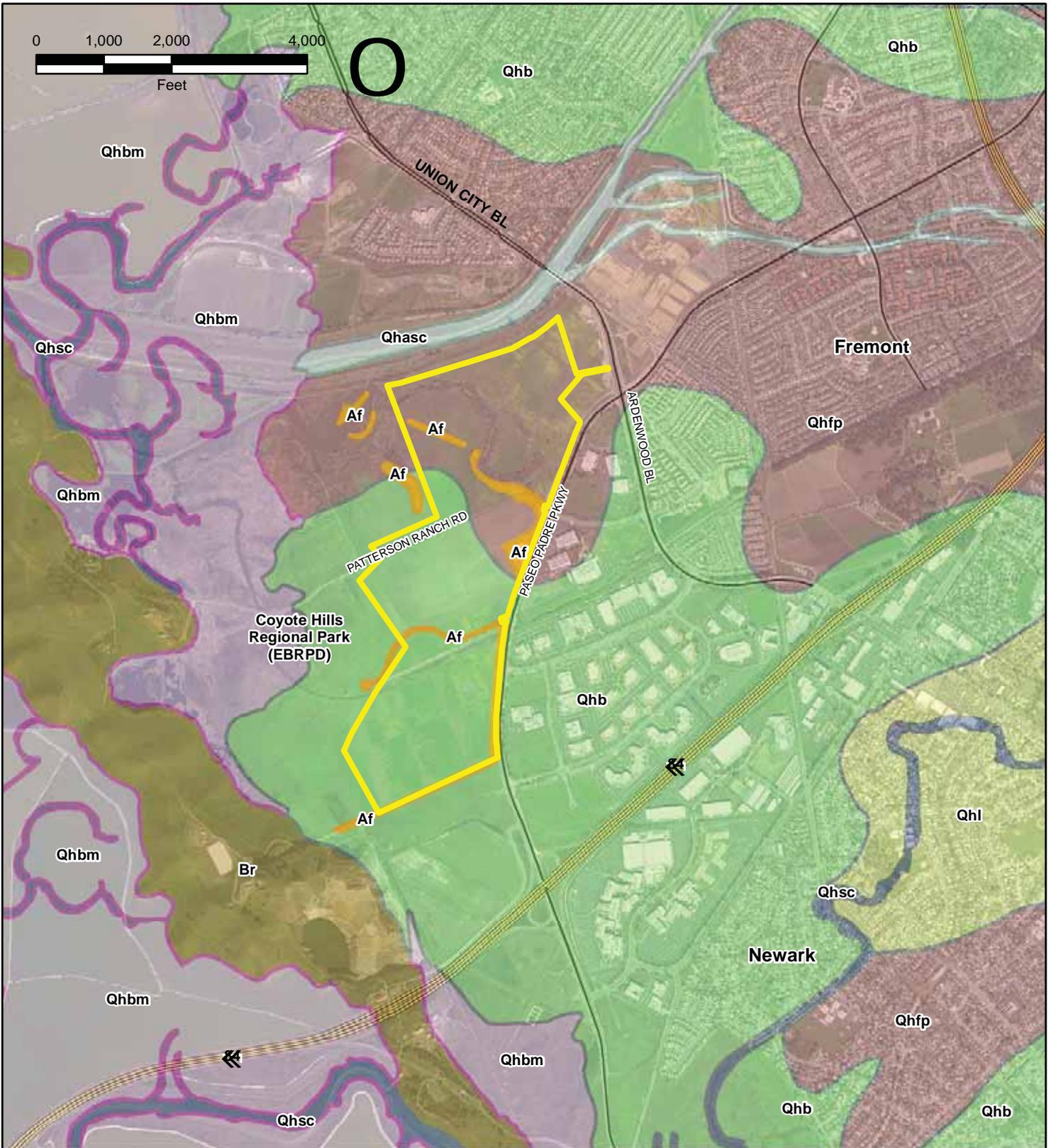
High levels of salt and sodium in the surface soils and subsoils in some areas will dictate the kinds of habitat that can be restored, especially in the southern and southwestern portions of the Park expansion area. Soil and drainage conditions are also poor. **Figure 14** shows soil salinity/alkalinity conditions in the Park expansion Project area based on soil sampling and laboratory analysis. The high groundwater conditions and the presence of saline-alkali shallow groundwater in some areas means that portions of project area and the plant communities that the soils and hydrologic conditions support may be susceptible to climate change and associated shallowing of the groundwater table and salinization. This will need to be accounted for in development of restoration and enhancement plans and management of plant communities.

Surface and Groundwater Hydrology

As noted in the Biology summary, hydrologic conditions in the project area have been significantly altered by historic farming including agricultural drainage and historical irrigation well pumping, urbanization, and flood control channel construction. (**Figure 15**)

Surface Water. In terms of surface water hydrology, the project area consists of a closed drainage basin bounded on the east by the higher ground of Paseo Padre Boulevard, on the north by the Alameda Creek Flood Control Levees, on the south by the Burrowing Owl Levee, separating the project area from Cargill Inc. lands, and to the west by the Coyote Hills foothills.

Surface water inflow into and through this basin is from storm water runoff and groundwater seepage into the Ardenwood Creek flood control channel, storm water runoff conveyed in the Line K/Crandall Creek flood control channel, and by incident rainfall which is collected in several historic agricultural drainage ditches and discharged to Line P and Line K near or immediately downstream of the Park expansion project area. Surface flow from Ardenwood Creek is through the J-pond complex west of the Park expansion area, where flood flows are held or is detained for eventual release via tide gates in the southern Alameda Creek levees when flow conditions in this



Derived from E.J. Helley and D.M. Miller, Geologic Map of the Newark 7.5 Minute Quadrangle, Alameda County, CA (1992). USGS Open-File Report 92-312.



Figure 11

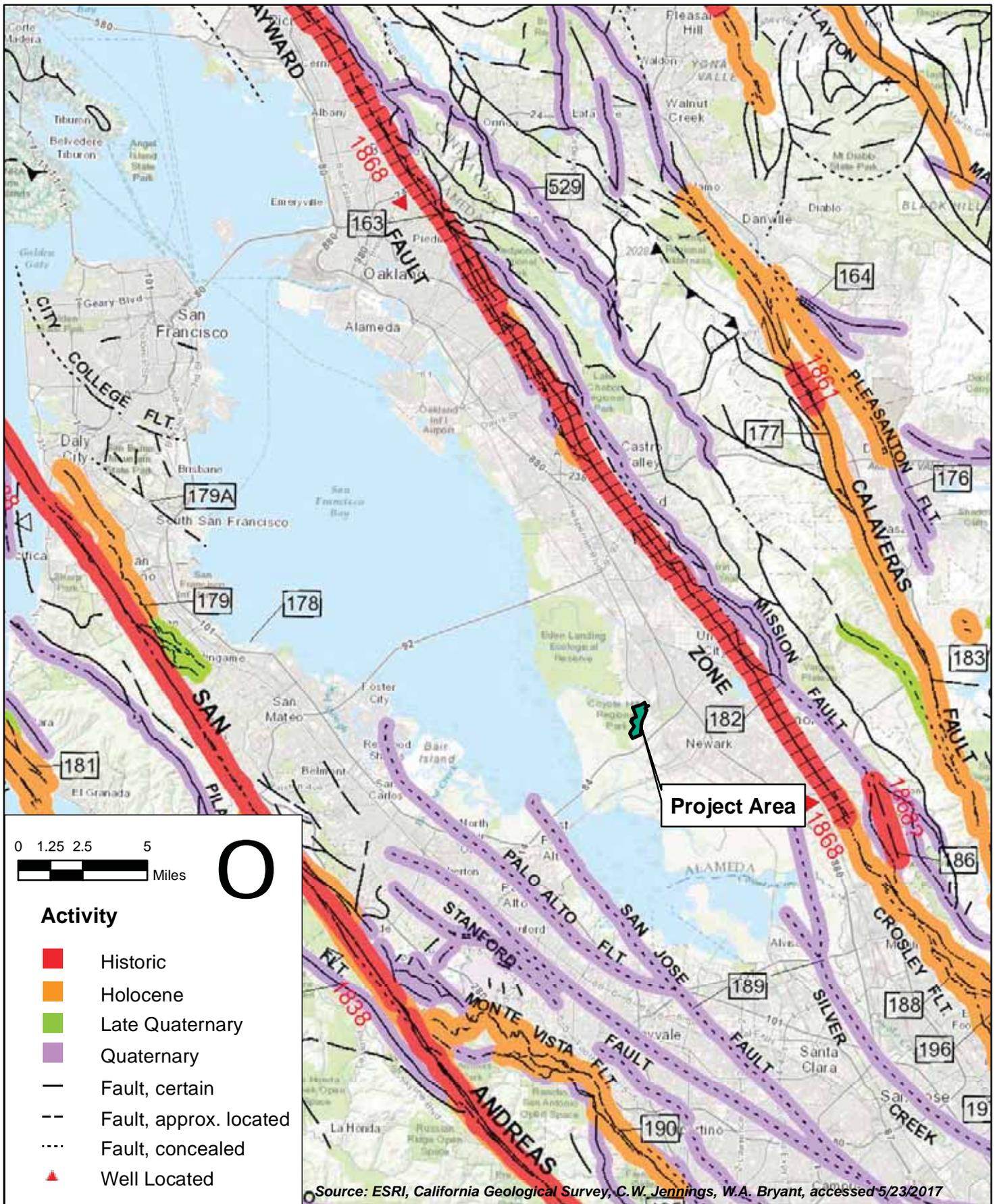


Figure 12

Source: Web Soil Survey and UC Davis SoilWeb

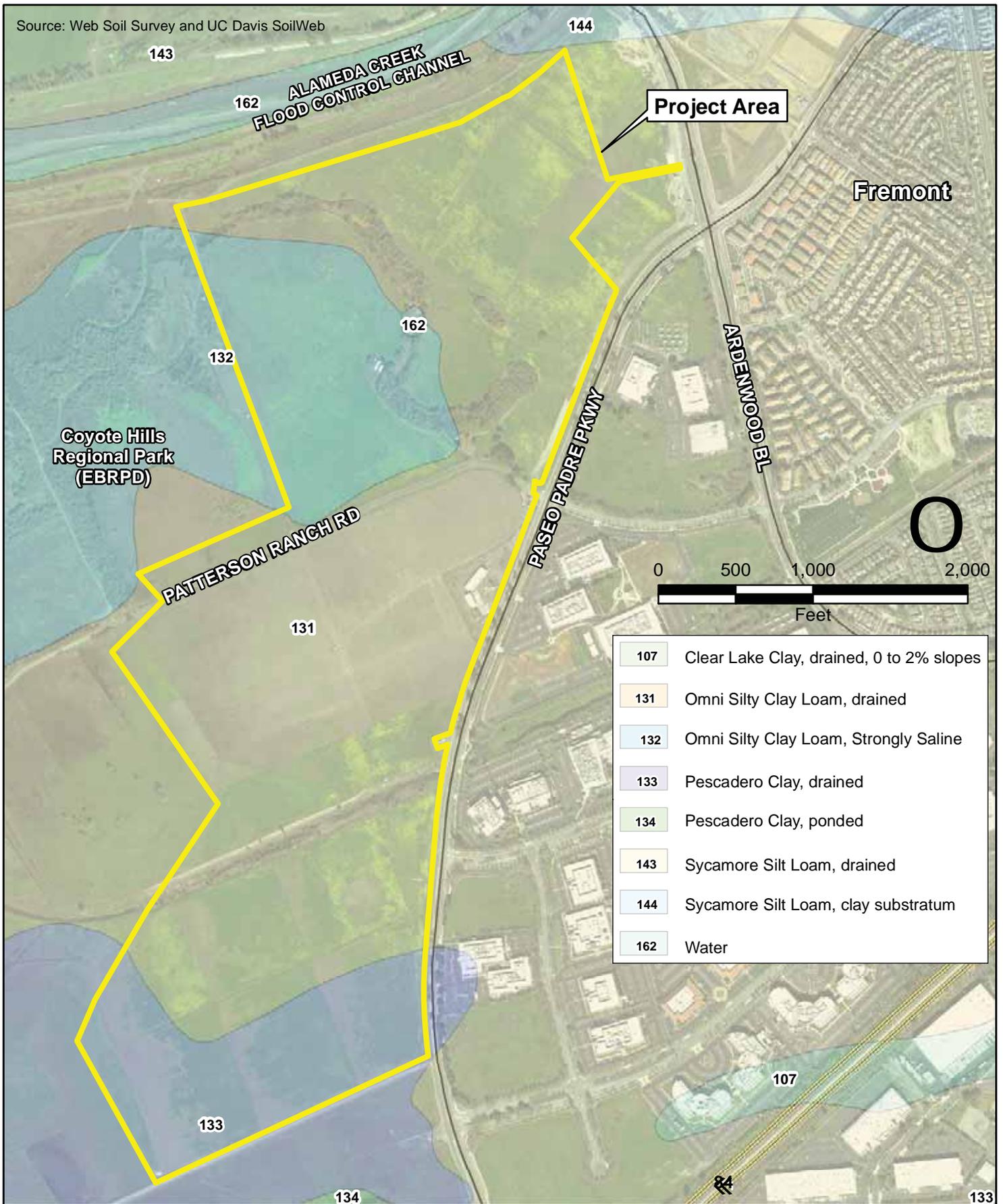
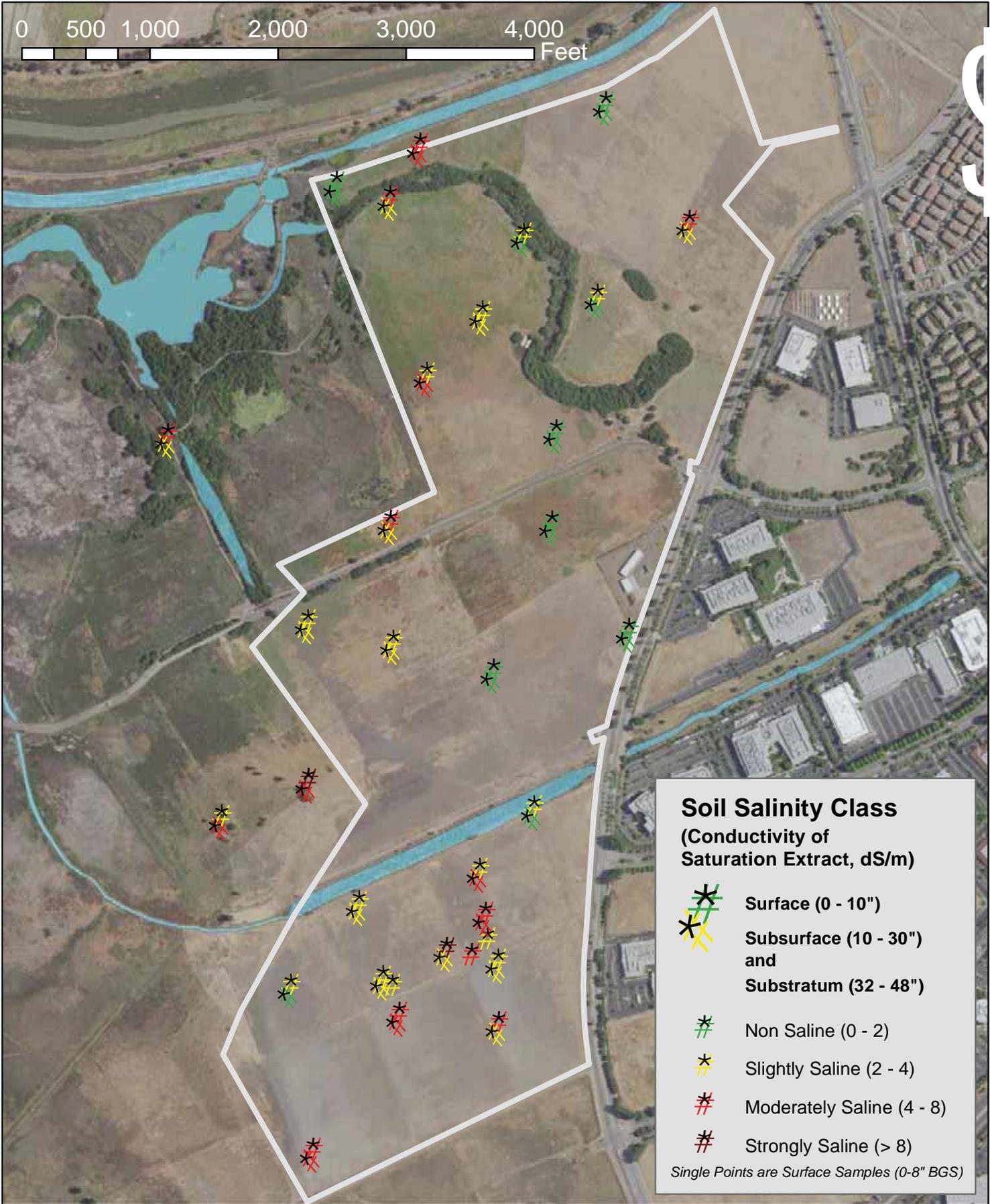
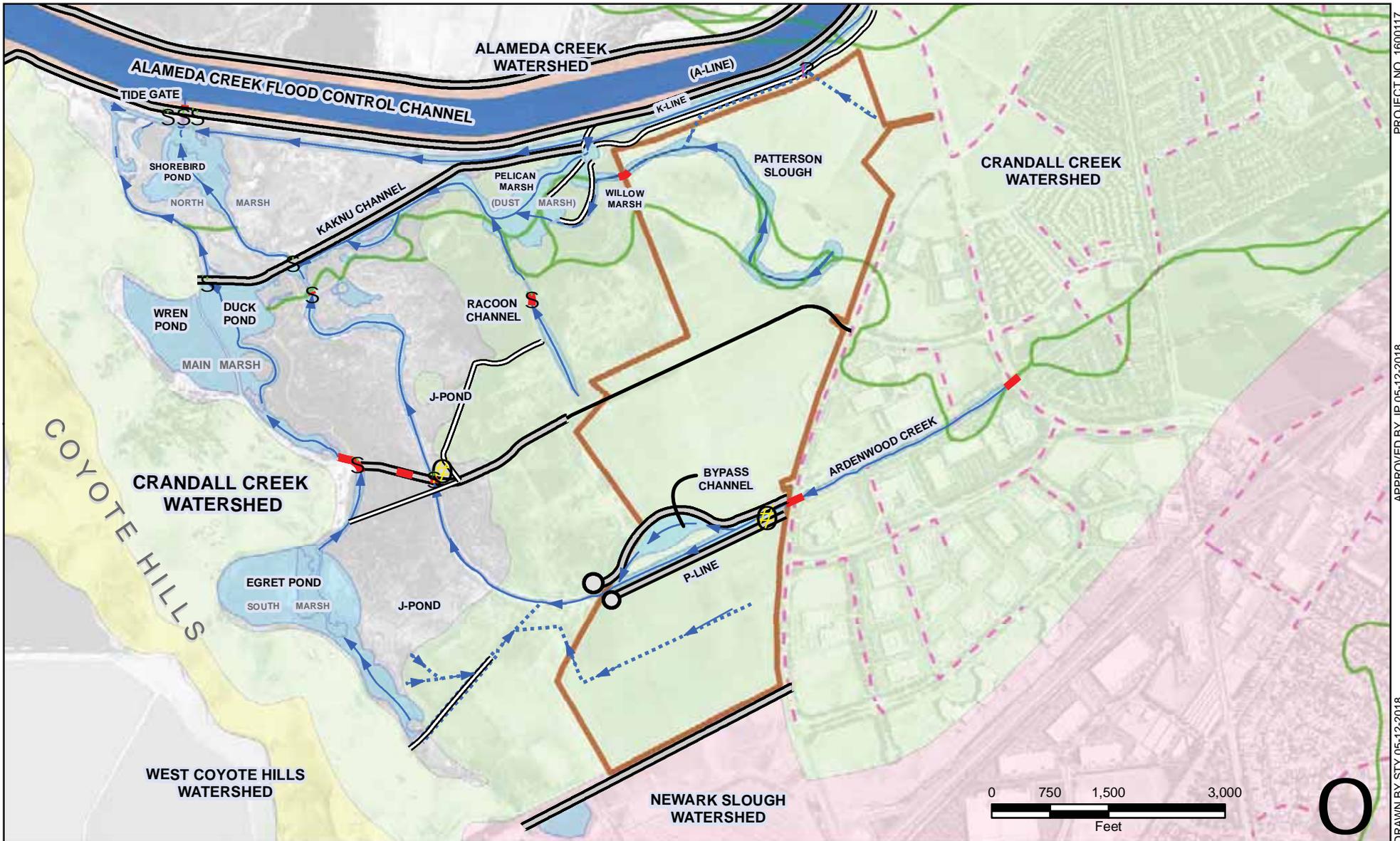


Figure 13

SOILS

Coyote Hills Restoration and Public Access Plan





PROJECT NO. 1600117
 APPROVED BY JP 05-12-2018
 DRAWN BY STY 05-12-2018

system allow release of the stored water through the levees. Extended periods of shallow ponding occur following heavy storm events such as occurred during the winter of 2016.

The surface water in Ardenwood Creek is fresh where it flows into the project area and becomes increasingly brackish as it moves through the historic tidal marsh and alkali wetlands to the west. It is brackish where Patterson Ranch Road crosses Ardenwood Creek.

Crandall Creek storm water runoff and flood flows mostly bypass the Park expansion project area in a leveed system on the north and eventually join flows from Ardenwood Creek downstream of the project area before discharging via the southern levee tidal gates of Alameda Creek. Crandall Creek flow is also fresh at the east end of the project area and becomes increasingly brackish to the west. FEMA floodplain mapping and site observations indicate a small amount of flow can potentially over-top the levee system to enter Patterson Slough, but this was not observed during the wet winter of 2016-2017. The Coyote Hills Regional Park to the west has not been included in FEMA floodplain mapping, but ACFCWCD has completed similar hydrologic studies that are used to plan and manage this area, which serves as a flood detention facility.

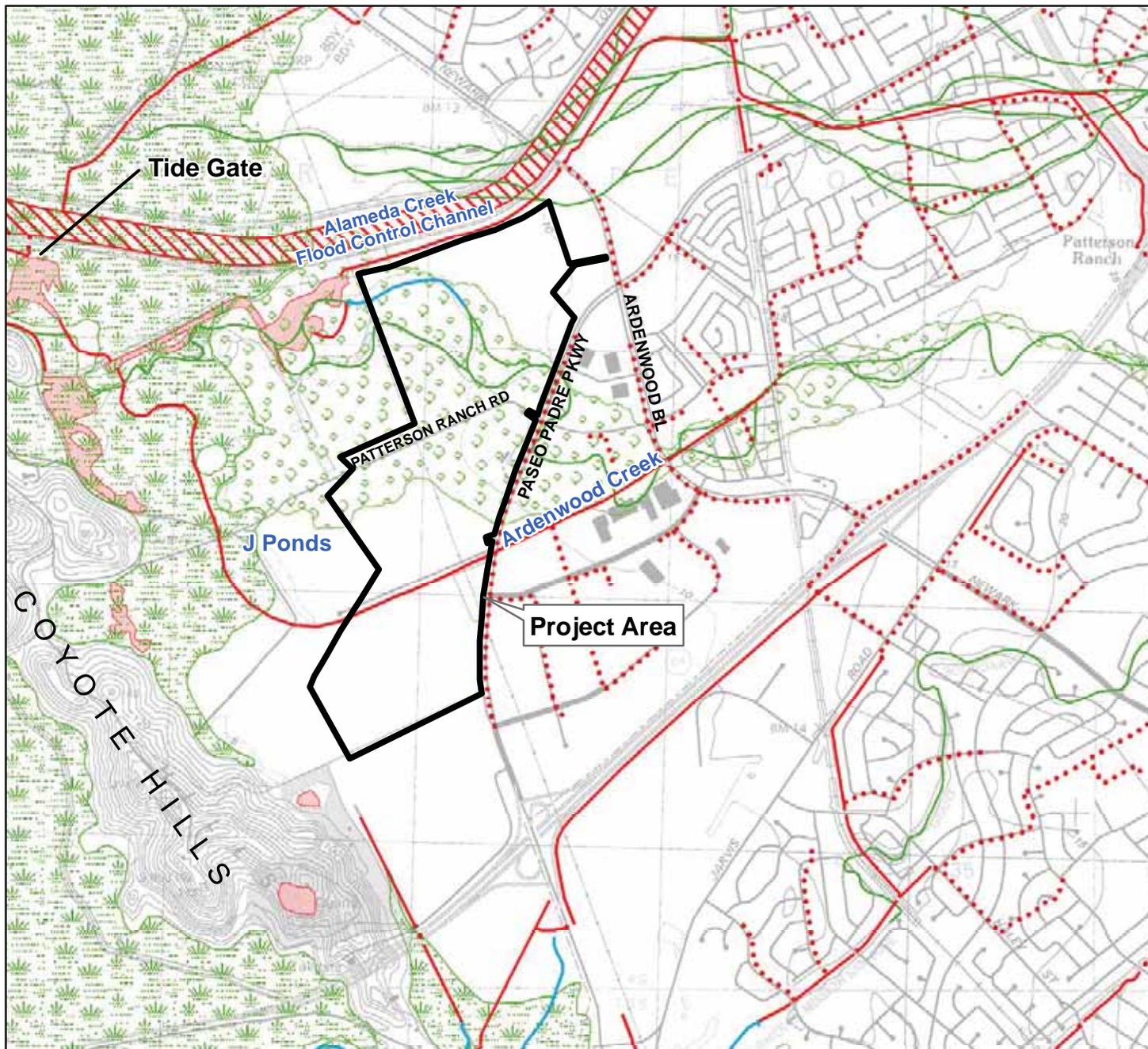
Patterson Slough is a remnant of the historic braided Ardenwood Creek Channel before flood channel construction relocated Ardenwood Creek to the south and placed Crandall Creek immediately to the north. **(Figure 16)** It has a small watershed that directs site runoff to Patterson Slough via a drainage ditch that originates parallel to and west of Ardenwood Boulevard and then runs along the outboard or toe of Crandall Creek levee to discharge to the Slough near its downstream end.

Patterson Slough does not hydrologically interact with its adjacent alluvial floodplain and serves hydrologically as a drainage ditch that intercepts shallow groundwater. Several deeper ponds within the Slough and the generally flat channel slope means that the Slough drains slowly and ponds water in the deeper ponds throughout most of the year in seasons with above average rainfall. The Slough discharges to the Dust Marsh west of the western end of the Park expansion project area via an 18-inch culvert. Water quality in the Slough is fresh to slightly brackish. Salinity levels are such that sensitive amphibians such as California red-legged frog may not be provided suitable habitat.

Groundwater. The groundwater hydrology of the Park expansion area is complex, both horizontally, and in the vertical dimension. This is especially the case in the upper zone, the 3 to 8 feet immediately below ground surface. The upper part of this shallow zone most influences native shrub and tree growth, and therefore restoration and enhancement design. An interpretation of depth to groundwater based on monitoring wells and soil borings and test pits is presented in **Figure 17**.

The shallow zone can be thought of as consisting of three distinctly different but interconnected ground water bodies of varying salinity-alkalinity **(Figure 18)**:

- A saline-alkali or very brackish body contained in very fine-grained estuarine deposits south of Ardenwood Creek that communicates slowly with and is influenced by San Francisco Bay water to the southwest and west. Ground water in this area varies seasonally in depth from 2 to 5 feet. This area was previously drained by agricultural ditches to allow farming, but the ditch system has since largely deteriorated. Shallow zone groundwater seeps into Ardenwood Creek, especially during summer months.
- Capillary rise of the shallow zone keeps sub-soils moist to near-saturated at depths of 1.5 to 2.5 feet below ground surface, and has caused salts and sodium to accumulate at very high levels that limits the survival of non-salt and sodium tolerant plants, especially in the subsoil. Restoration grading that exposes the highly saline alkali sub-soils needs to be considered in design and native plant materials selection. In places, water ponds in shallow surface depressions (historically alkali vernal pools) and perches on a dense, discontinuous sub-soil clay zone during winter months. These merge to create near continuous saturated soil conditions for periods of time following especially heavy rain events, in places in the southern part of the Project area.



Flow Network

- Creek, watershed at least 0.2 sq km
- Engineered Channel
- ⋯ Underground culvert or storm drain, ≥ 24" diameter
- ▨ Flood Control Channel, at least 200 ft wide
- Modern Shoreline
- Bay or Natural Lake
- Artificial Water

Historical Features, Circa 1850

Historical Creek

- Well-located
- A Well-located with distributary point
- - Approximately located
- A - - Approximately located with distributary point
- Historical Shoreline

Historical Wetlands

- ▨ Historical Tidal or Freshwater Marsh
- ▨ Historical Beach
- ▨ Historical Willow Grove
- ▨ Historical Slough
- ▨ Historical Salt Pond
- ▨ Historical Lake

Modified from Creek & Watershed Map of Western Alameda County: A Digital Database (2010). Oakland Museum of California.

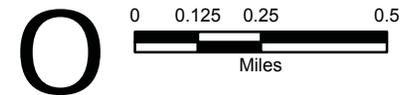
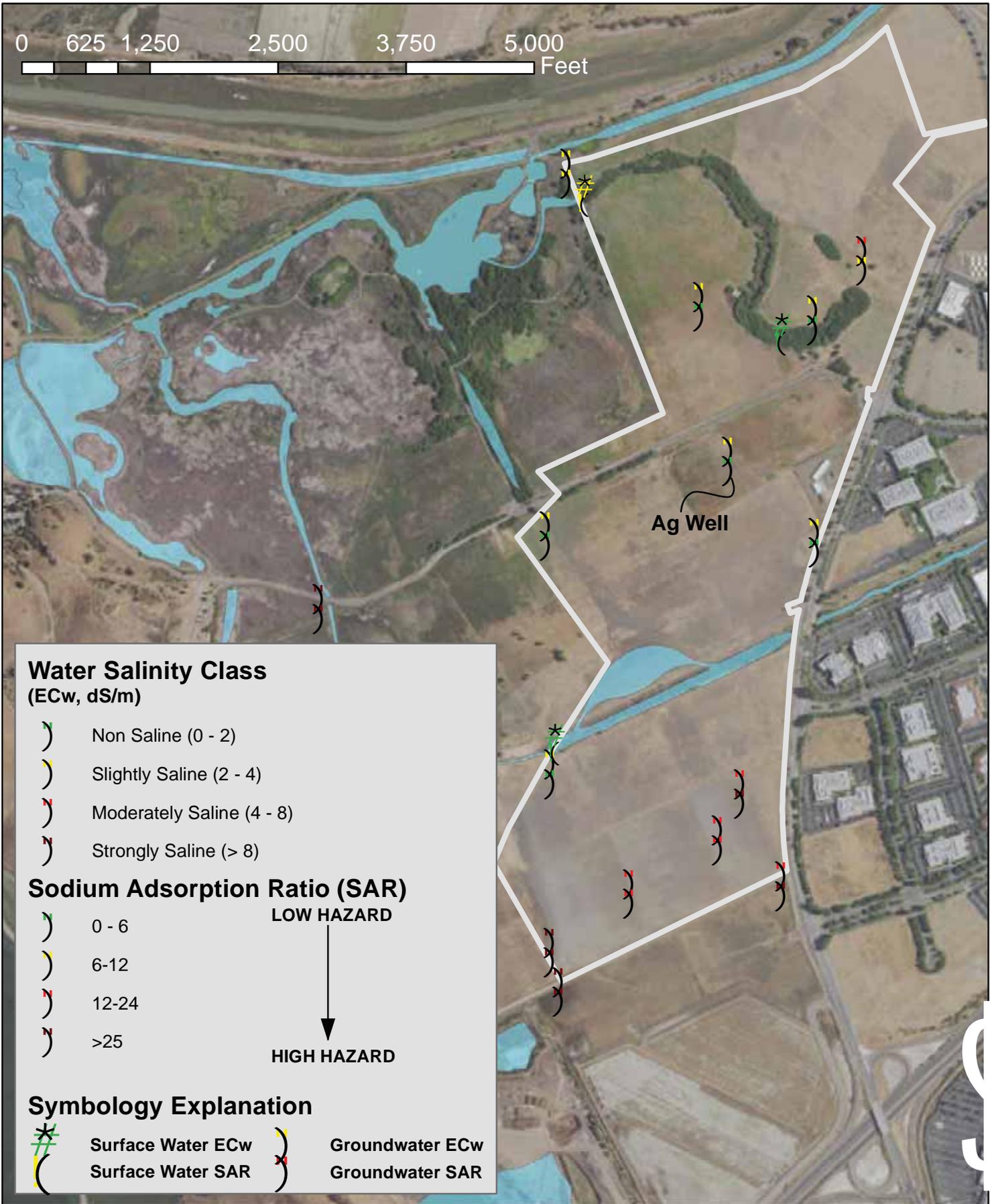




Figure 17

Generalized Depth to Shallow Zone Winter Groundwater
Coyote Hills Restoration and Public Access Plan

0 625 1,250 2,500 3,750 5,000 Feet



Water Salinity Class
(ECw, dS/m)

- ⌋ Non Saline (0 - 2)
- ⌋ Slightly Saline (2 - 4)
- ⌋ Moderately Saline (4 - 8)
- ⌋ Strongly Saline (> 8)

Sodium Adsorption Ratio (SAR)

- ⌋ 0 - 6
 - ⌋ 6-12
 - ⌋ 12-24
 - ⌋ >25
- LOW HAZARD
↓
HIGH HAZARD

Symbology Explanation

- ⌋* Surface Water ECw
- ⌋ Surface Water SAR
- ⌋* Groundwater ECw
- ⌋ Groundwater SAR

- A fresh to very slightly brackish shallow groundwater body occurring in the vicinity of north of Ardenwood Creek and south of Patterson Ranch Road. This groundwater body is contained in fine grained alluvial basin deposits at depths ranging seasonally from 2 to more than 6 feet. Ground surface elevations are slightly higher in the eastern part of this area and the soils are better drained. This eastern area has the best and most productive agricultural soils. Pondered conditions and seasonally perched shallow groundwater occurs in the western most part of this area, extending to an area north of Patterson Ranch Road near the existing kiosk.
- A fresh to slightly brackish shallow zone groundwater body extends north of Patterson Ranch Road. The confining clay layer that separates the shallow zone from somewhat deeper groundwater is mostly missing from this area, stripped by geologic time-line erosion. This allows groundwater contained in sands and gravels associated with the ancestral Ardenwood Creek braided stream system to up-well under artesian forces. Groundwater apparently flows slowly through the finer grained stream alluvium in this area, and more rapidly in sub-surface preferential flow paths created by the near-surface buried stream channel deposits. Groundwater levels in this area respond rapidly to upstream recharge along Alameda Creek in the Niles Cone groundwater recharge area. Groundwater flowing in the shallow buried stream sands and gravels is intercepted in the channel bank of Ardenwood Creek east of Paseo Padre Parkway and also up-wells in the bottom of Patterson Slough, a remnant of the historic Ardenwood Creek. This area also has depressional areas and perching zones near the Slough that result in extended periods of shallow water ponding and saturated sub-soil conditions. Shallow groundwater with a capillary fringe that keeps the potential root zone of native tree species damp to moist throughout much of the year in average and above average rainfall years occurs here. This creates favorable conditions for riparian restoration without the need for extensive grading and hydrologic conditions modification.

In addition to the shallow groundwater zone, which affects restoration and agriculture, there are several recognized deeper aquifers, including an upper or Newark aquifer, a middle zone consisting of the Centerville and Fremont aquifers, and an unnamed deep aquifer. Water in the upper aquifer has been affected by Bay sea water intrusion and is slightly saline and non-potable. It may be suitable for restoration plant establishment irrigation, but not for most agricultural crops. The middle and deep aquifers have the best quality of water and are used for municipal and agricultural purposes. Alameda County Water District closely manages the Niles Cone groundwater basin, including destroying or closing poor quality or abandoned wells, especially those located close to the Bay, monitoring and regulating new wells, and bore holes, and conducting an active groundwater recharge program to store water, reverse bay sea water intrusion, and protect and improve groundwater quality.

Climate Change and Sea Level Rise

The Project area is not physically connected to San Francisco Bay and therefore will not be directly physically impacted by rising Bay tides, including extreme tides, with sea level rise. In general terms, climate change will likely result in a warmer and dryer climate in northern California. Recent trends indicate that northern California is already experiencing some of the hottest years in recorded history. It is also experiencing shorter winters, with significant rainfall appearing to come later in the season and ending sooner than typical historic patterns. Rainfall intensity and runoff patterns also appear to be changing, with more short-duration high-intensity storms and associated flashy runoff events.

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Sea level rise in this managed flood control basin would primarily affect the efficiency of discharging flood waters through Alameda Creek levee tide gates from Ardenwood Creek and Crandall Creek inflows, because of the result-

O



Water Bodies



2017 water bodies are expected to expand in size and depth to flood adjacent emergent marshes and seasonal wetlands.

Low Lying Areas



Most low lying areas will become ponded seasonal wetlands or shallow freshwater marshes.

Unshaded Areas



These areas are mostly above 11 feet in elevation and are not subject to drastic ecosystem changes. Some areas may experience increased frequency and depth from flooding.

Model adapted from NOAA Coastal Services Center Sea Level Rise Data: 5ft above Mean Higher High Water Inundation Extent (2012), Sea-Level Affecting Marshes Model for Don Edwards NWR (2010). Other data acquired from the Department of Commerce (DOC), National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Coastal Services Center (CSC), California Aquatic Resource Inventory (2016).

ant higher tidal levels in Alameda Creek and higher flood water surface elevations. Climate change may result in more frequent and prolonged periods of ponding in seasonal wetlands and within the Patterson Slough, as well as the gradual rise of the shallow groundwater table associated with tidal affects on groundwater from the bay margin to the west and southwest. The shallow groundwater zone may also become more saline and alkaline over time, associated with the influence of rising Bay tides. The AFCWCD Phase 2 Flood Control Project , which will improve Line P through the existing Park, will help alleviate the depth and extent of winter ponding.

The only existing infrastructures potentially at risk in the not too distant future throughout the Project area are several low areas along Patterson Ranch Road between the kiosk and the vicinity of the Ardenwood Creek Crossing leading to Park headquarters and the Visitors Center. It is expected that as a result of a rise in bay tidal elevations, perennial and seasonal wetlands occurring within and near the Park expansion area will be ponded deeper, and for longer periods with climate change, with some areas with more extended ponding and becoming near perennial. Longer periods with deeper water may be expected to occur in current ponded areas dominated by cattails. (**Figure 19**). Some of these ponded areas currently dry out in late summer and fall months prior to the start of the winter rains period. Especially susceptible to extended ponding and higher groundwater are the low lying areas near the west end of Patterson Slough, and the west side of the central and south portions of the Park expansion area. This effect may increase their wetlands functions and values if properly accounted for in planning and design.

Other potential threats to the Project area from climate change are principally related to an expected increase in extreme weather events, including more often and prolonged periods of drought, and more often very wet winters, when extended shallow water ponding occurs. Shallow groundwater levels may fluctuate up and down during these periods of drought and abundant rainfall, but the long-term trend is anticipated to be a gradual rise in the shallow zone groundwater table, and increased shallow zone groundwater salinity and alkalinity.

Access and Circulation

Currently there are four ways to access the project area, with only one open to the public via automobile; Patterson Ranch Road. This paved road is accessed from Paseo Padre Parkway and extends about 1 ½ miles west to the Coyote Hills Visitor Center. The other three access roads are available to park maintenance staff and to emergency vehicles for incident response:

Crandall Creek Trail- This access way is along the Crandall Creek levee, on the north side of the project area, where it connects to the Willow footpath near the outlet of Patterson Slough. It is designated as a footpath on the existing Coyote Hills Regional Park Trail Map.

Ardenwood Creek Maintenance Roads: Flood control maintenance roads were constructed by ACFCWCD on both the north side and the south sides of the creek as part of their 2016 Line P Flood Control Project. They currently end just past the west end of the Park expansion area. They are not currently available for public use.

Burrowing Owl Trail- This existing multi-use trail is located on the levee embankment that forms the south boundary of the Park expansion area. It is not open to the public for automobile access. The levee maintenance road extends west to the vicinity of the new Dumbarton Quarry Park, scheduled to open to the public in 2019.

All of these existing access ways are potentially available for future use to make off-site trail connections. In addition to these, there is an easement for possible future access to Ardenwood Boulevard, between the Fremont Unified School District school parcel and the city of Fremont park parcel in the northeast corner of the project area.

Utilities and Infrastructure

There is significant existing utility infrastructure crossing through the Project Area, including a 4-inch pressurized sewer line running along the north side of Patterson Ranch Road, along with a 4-inch (not live) PVC water line that is not connected to a meter. A Kinder–Morgan high-pressure underground gas line, Union Sanitary District (USD) sewer trunk and PG&E high-voltage overhead electrical utility lines run southeast to northwest, diagonally across

the property within a utility easement, and there is a Hetch Hatchie water pipeline on the northeast edge near and parallel to Ardenwood Boulevard. A 3-inch water supply line also runs diagonally across the southern and central portion of the property from the vicinity of Dumbarton Court to the vicinity of Kiosk, where it turns to head west along Patterson Ranch Road to serve the visitor center. All of the non-Park District utilities have easements that contain restrictions on construction of improvements within their easement areas, and also have design standards and procedures for new hook-ups to their facilities which are applicable to proposed Park improvements.

Overhead power lines run along the north side of Patterson Ranch Road to the vicinity of the kiosk and provide power to several irrigation wells on the south side of this roadway. Irrigation infrastructure including abandoned wells, concrete well stand pipes and subsurface piping also occurs throughout much of the project area.

The project area is not within the existing service area of Union Sanitary District and connections to this utility will require annexation, which is subject to approval by the Alameda County Local Agency Formation Commission (LAFCO).

Public Services

Police, fire, and emergency response to incidents occurring within the project area are currently handled cooperatively in agreements with the City of Fremont Police and Fire Departments and the Alameda County Fire Department. Follow-up investigations and incident reports are typically handled by the East Bay Regional Park District Police Force. Since most of the Project area is in a "land-bank" status, current park operations and maintenance needs are minimal. Patterson Ranch Road and the Tuibun Trail to the Visitor Center pass through the project area and current Park District staff assigned to Coyote Hills Regional Park patrol and maintains this area, including the small gravel parking lot at the Paseo Padre Parkway intersection. The adjacent farm fields and fallow lands are fenced off and preclude current access by visitors. Park staff oversees weed line trimming along the fence lines, mowing and/or goat grazing of the fallow fields, and provide on-going coordination with the farm lessee.

3.0 CEQA ENVIRONMENTAL CHECKLIST

PROJECT DESCRIPTION AND BACKGROUND

Project Title:	Coyote Hills Restoration and Public Access Project
Lead agency name and address:	East Bay Regional Park District, 2950 Peralta Oaks Court, Oakland, CA 94605
Contact person and phone number:	Karla Cuero, 510.544.2622
Project Location:	In the northwest corner of City of Fremont, California, east of Don Edwards San Francisco Bay Wildlife Refuge and Coyote Hills Regional Park, north of State Highway Route 84, west of Ardenwood Boulevard and Paseo Padre Parkway, and south of Alameda Creek
Project sponsor's name and address:	East Bay Regional Park District, 2950 Peralta Oaks Court, Oakland, CA 94605
General plan description:	RCP (Open Space – Resource Conservation/Public)
Zoning:	O-S (Open Space)
Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation.)	See 1.1 Project Description, above.
Surrounding land uses and setting; briefly describe the project's surroundings:	West of the project site is the existing Coyote Hills Regional Park and Don Edwards San Francisco Bay Wildlife Refuge. An undeveloped, privately-owned parcel and State Highway Route 84 are located to the south. Ardenwood Boulevard and Paseo Padre Parkway and residential and commercial development is located to the east. Alameda Creek is located to the north.
Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements):	See 2.3 Permits Needed, above.

<p>Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?</p> <p>Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.</p>	<p>California Native American tribes traditionally and culturally affiliated with the Project area requested consultation, which was completed on February 22, 2017.</p>
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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 3 for additional information.

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

DETERMINATION:

On the basis of this initial evaluation:

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

Signature:	Date:
Printed Name: Karla Cuero	For: East Bay Regional Park District

CEQA Environmental Checklist

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included following the applicable section of the checklist. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

	Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comment to Questions

- a) The existing Coyote Hills Regional Park, adjacent to the expansion area on the west, contains important aesthetic and visual resources. Because of its unique location, open character and varied topography, the Park provides picturesque vistas of the south and central San Francisco Bay region and is visible from distant points as well. Views of wetlands, Don Edwards San Francisco Bay National Wildlife Refuge, the surrounding San Francisco Bay and their associated habitats, and nearby open space including the proposed expansion area, are an important component in the Park's enjoyment. Paseo Padre Parkway, adjacent to the project site on the east, is designated as a scenic route in the Fremont General Plan² and Alameda County General Plan.³ The Alameda Creek flood control channels are considered a scenic resource by the City of Fremont.

The proposed project, which would expand the existing Park to the east, would not affect the visual resources of the Park or the Alameda Creek Flood Control Channel and would have a beneficial impact on the expansion project site. The proposed project would preserve the visual resources of the existing Park, and would enhance the visual characteristics of the project site and provide additional access and vantage points for views of both the existing Park and the expansion area. The project also would enhance scenic resources visible from Paseo Padre Parkway looking to the west. Project objectives in the Land Use Plan Amendment include habitat restoration and enhancement, and improved public access. Project features that would enhance scenic views include 5 miles of new trails and up to six wildlife observation platforms, which would provide new access to the restored/enhanced wetlands and the Historic Patterson Ranch Farm and Farm Yard Agricultural Unit.

² City of Fremont, City of Fremont General Plan, Adopted December 2011, Community Character Element, Diagram 4-6.

³ Alameda County, Scenic Route Element of the General Plan, May 1966, Amended May 5, 1994, Scenic Route Element of the General Plan Map.

Impacts on scenic views caused by construction of visitor facilities, trails, and infrastructure would be temporary in duration and limited to relatively small portions of the site.

In conclusion, the proposed project would have a *less-than-significant* impact on scenic vistas.

- b) The closest state scenic highway to the project area is the portion of SR 84 between Mission Boulevard and I-680 (Niles Canyon).⁴ Although SR-84 runs approximately one mile south of the project area, the segment officially designated as a state scenic highway is located approximately six miles east of the project area. Due to this distance, this designated portion of SR-84 is not within the project's viewshed. Motorists traveling on the state designated scenic segment of SR-84 would not be able to see the project area, nor would individuals on the project site be able to view the scenic highway portion of SR-84. Thus, the project would have *no impact* on views from a state scenic highway.

Paseo Padre Parkway, bordering the project site to the east, and the segment of State Highway Route 84 located south of Coyote Hills Regional Park and the proposed expansion site, have been designated "Scenic Routes" by Alameda County⁵ and the City of Fremont⁶ because they provide unique vistas. The proposed project's habitat and wetland restoration and enhancement would improve scenic resources visible from these designated scenic routes. Retaining the Milk House building, metal storage buildings and agricultural uses would not substantially alter existing scenic resources, nor would construction of trails, observation platforms, entry kiosk, restroom, parking lot, or buried infrastructure. None of these project components would introduce large or incompatible new visual elements to the Park, or substantially degrade its scenic quality. The adjacent Coyote Hills Regional Park contains unique natural and geologic features, like the Coyote Hills themselves, whose scenic character is particularly important. The proposed project would not adversely affect, and would provide additional public access and vantage points for, these existing visual resources. However, demolition of the Labor Contractors residence would result in the loss of an historic building. This is discussed in Section V. Cultural Resources, below.

- c) The proposed project would restore and enhance the Patterson Slough, Western Wetlands, and Southern Wetlands Natural Units, which would improve the visual character of these areas. The existing Patterson Ranch farm fields would continue to be used for agriculture, two existing metal storage buildings would be retained, and the historic Milk House building would be preserved and may be adaptively reused for agriculture-related purposes. The existing informal parking area at the intersection of Patterson Ranch Road and Paseo Padre Parkway would be relocated to an existing service area adjacent to the existing storage buildings, and this area would be restored with native vegetation.. None of these changes would substantially alter the existing visual character of the Historic Patterson Ranch Farm and Farm Yard Agricultural Unit. The existing historic Labor Contractors residence would be demolished and the building site would be included in the restoration of the Patterson Slough Natural Unit. Although demolition of this historic building would have a significant impact on historic architectural resources (see Section V. Cultural Resources), demolition and removal of the Labor Contractors residence would not adversely affect the visual quality of the project site because it would allow the site to be returned to a more natural appearance.

4 California Department of Transportation, California Scenic Highway Mapping System, available online at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm, accessed 2 May 2108.

5 Alameda County, Scenic Route Element of the General Plan, May 1966, Amended May 5, 1994, Scenic Route Element of the General Plan Map.

6 City of Fremont, City of Fremont General Plan, Adopted December 2011, Community Character Element, Diagram 4-6.

The proposed project would construct additional visitor facilities including a 100-car parking lot, restroom, picnic facilities, and new entry kiosk. Proposed bridge crossings include a footbridge to make a connection to the existing Crandall Creek Trail, an 80-foot bridge crossing of Ardenwood Creek west of the western end of the Park expansion area, and a 10-foot wide aluminum structure, cantilevered off of the existing Ardenwood Boulevard crossing of the Alameda Creek Flood Control Channel. This proposed structure would be the most visible to motorists on Ardenwood Boulevard and Paseo Padre Parkway and trail users on the Crandall Creek and Alameda Creek Trails. These structures would both allow greater public access to the enhanced visual resources provided by the project, and alter the existing visual character of the project site. However, the structures and parking lot would be small in scale in relation to the entire acreage of the Park (less than one acre of the 306-acre project site), and would be clustered within a small portion of the site and landscaped with buffer vegetation to blend with surrounding vegetation and existing views. New “developed” areas within the Park expansion area would occupy about 7 acres, less than 5% of the total area. For these reasons, the new structures would not substantially change the existing visual character of the site.

Approximately 5 miles of new trails would be constructed, along with up to six wildlife observation platforms. The trails, which would be constructed at grade, would allow increased public access to the visual resources at the site but would not substantially alter the site’s visual characteristics. The viewing platforms, which would be elevated five to eight feet above adjacent grade at locations dispersed throughout the project site, would also increase publicly available views. The observation platforms would be visible from nearby and intermediate vantage points on the site, but would not substantially alter the predominantly natural appearance of the expansion project site.

New and upgraded utilities would be buried and, after construction, would not affect the visual character of the site.

The project would not conflict with the applicable zoning class (Open Space), or Fremont General Plan policies governing scenic quality.

Implementation of the LUPA would not substantially alter the project area's distinctive visual character, substantially degrade public views of the site, or conflict with applicable zoning and other regulations governing scenic quality. Therefore, the project would cause a **less-than-significant** visual impact.

- d) The proposed project would not include any lighting, because park hours would be from sunrise to sunset, and the project restrooms would be locked at night. The project would not create any new sources of light or glare, and there would be **no impact**.

Mitigation Measures

N/A

Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
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II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on 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 the 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comment to Questions

a) The project site is comprised of vacant land that was farmed for over 100 years, beginning in the 1850s. Under the terms of a current lease agreement with Perry Farms Inc., about 115 acres of land located both north and south of Patterson Ranch Road are available to be farmed. However, because of the lack of a dependable irrigation water supply north of Patterson Ranch Road and poor soil conditions, only about 50 acres (south of Patterson Ranch Road) are suitable for farming. About 20 acres of land was farmed in 2016, but the land was fallowed in 2017 and 2018 because of a problem with the irrigation well. This land is farmed using certified organic farming methods. The existing lease with the farm operator expires in December of 2019, but can be renewed. Other areas of the project site, including the Western Wetlands Natural Unit, are no longer suitable due to poor soil conditions and deterioration of the former agricultural drainage system. The California Department of Conservation (DOC), which administers the Farmland Mapping and Monitoring Program (FMMP), updated its maps in 2008 for Alameda County, and changed the farmland designation for the project site to "Grazing Land" with a small portion designated as "Other Land".⁷ Because the project is not located on Prime Farmland, Unique Farmland, or Farmland

⁷ California Department of Conservation, Farmland Mapping and Monitoring Program, California Important Farmland Finder, available online at: <https://maps.conservation.ca.gov/DLRP/CIFF/>, accessed 2 May 2108.

of Statewide Importance, it would not convert such land to non-agricultural use. There would be **no impact**.

- b) The project site is in an Open Space zoning class, which has the purpose “To permit limited but reasonable use of open lands while protecting the public health, safety and welfare from the dangers of seismic hazards and unstable soils; preserve the topography of the city that shapes it and gives it its identity; allow land to be used for agricultural production in its natural or as near natural state as possible; coordinate with and carry out regional, county, and city open space plans...”⁸ Because the project site is not zoned for agricultural use, the proposed project would not conflict with zoning for agricultural use. There would be **no impact**.

In 2013, a Deed Restriction and Declaration of Covenants was recorded by the Patterson Ranch property owner and the Park District, with the City of Fremont a designated third party beneficiary, to satisfy requirements of the Patterson Ranch Planned District to protect 102 acres of land for open space and agricultural purposes. The purpose of the Declaration is to prevent use of 102 acres of the area by actions that would permanently impair the site’s agricultural values, and acknowledge that the site also has open space, scenic, recreational, ecological and natural habitat resources values (“Conservation Values”). The Declaration further states that the 102-acre area may be relocated elsewhere on the site, or elsewhere within Alameda County, subject to agreement. Activities consistent with the purpose of the Declaration include:

- Trails and signage
- Structure needed to preserve, maintain and enhance Agricultural and Conservation values
- Passive recreation, including but not limited to walking, hiking, horseback riding, biking, bird watching, and picnicking
- Restoration and enhancement of existing wetland areas including flood and/or habitat improvement
- Wildlife food plots
- Vegetation buffers along wetlands
- Cultivation of grasslands
- Grazing
- Use for educational purposes related to Agricultural and Conservation values
- Construction, installation, placement, repair and maintenance of underground utilities

Approximately 68 acres of the southernmost portion of the project area are subject to a Williamson Act contract entered into by the owners and the City of Fremont in 1976.⁹ The contract limits the use of this part of the property to agriculture and compatible uses. The portion of the site subject to the Williamson Act contract is located entirely within a larger, 136-acre area, also in the southern portion of the site, that is subject to an existing open space easement, which similarly limits the use of the property to agriculture and compatible uses. The 68 acres of land under Williamson Act Contract are located in the proposed project’s Southern Wetlands Natural Unit. This previously farmed area would be restored to a mixture of wetlands and oak savanna by the Alameda County Flood Control and Water Conservation District as an independent project. Once fully functional, the lands would be turned over to the Park District to manage as part of Coyote Hills Regional Park. As part of the proposed project evaluated in this environmental document, the Park District would convert the maintenance access roads in this area into shared-use trails by the installation of signs, wildlife observation areas for use, gravel surfacing in some areas, and

8 Southern Alameda County GIS Authority, available online at: <http://egis.fremont.gov/apps/public/>, accessed 1 May 2018.

9 City of Fremont, Final Environmental Impact Report, Volume I – Modified Recirculated Draft EIR, State Clearing-house #2007102107, Patterson Ranch Planned District, September 2010, page 4.2-4.

construction of a short connector trail and a new vehicular and pedestrian/bicycle bridge that can be used by service vehicles over Ardenwood Creek. Because these uses would not preclude future agricultural use of the 68 acres under Williamson Act contract, they would be compatible with agriculture. Therefore, the project would not conflict with the existing Williamson Act contract, and **no impact** would occur.

- c) As discussed in Section II.b, above, the project site is not zoned as forest land, timberland, or Timberland Production. The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or Timberland Production. **No impact** would occur.
- d) There is no forest land on the project site. There would be **no impact** on forest land.
- e) The project site has no forest land and would not involve changes that would result in conversion of forest land to non-forest use. As discussed in Section II.a, above, the project site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. However, the project site contains land that is designated as Grazing Land. The proposed project would maintain the agricultural use of the Patterson Ranch Farm fields. The remainder of the project site would be maintained as open space, with habitat and wetland restoration. This would not preclude future agricultural use of the site, and therefore would not result in the permanent conversion of Farmland to non-agricultural use. This impact would be **less-than-significant**.

Mitigation Measures

N/A

	Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
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III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comment to Questions

The project site lies in the Southwestern Alameda climatological sub-region of the Bay Area. The air pollution potential of this sub-region is relatively high in the summer and fall when regional winds can transport pollutants from other areas and where the confining terrain of the East Bay hills can concentrate them locally¹⁰. This sub-region contains numerous and varied stationary industrial/commercial air pollution sources and major regional roadways, including I-880, I-680 and State Route (SR) 84, which are also major pollutant sources. Several stationary industrial/commercial air pollution sources are clustered in the Ardenwood Technology Park east of the Paseo Padre Parkway across from the Project site. SR 84 passes less than a mile south of the Project site and Paseo Padre Parkway, a major local arterial and the Project site's main access route, runs along the eastern Project site boundary.

The Bay Area Air Quality Management District (BAAQMD) maintains a number of air quality monitoring stations and continually measures the ambient concentrations of major air pollutants throughout the Bay Area. The closest such monitoring station is at 40733 Chapel Way in Fremont, about 5 miles east of the Project site in central Fremont. Ozone (which is formed from precursors - reactive organic gases [ROG] and nitrogen oxides [NOx]) and inhalable/fine suspended particulate matter (PM₁₀/PM_{2.5}) are monitored there, and exceedances of ozone and particulate ambient air quality standards have been recorded there in recent years¹¹. These are the primary air pollutants of concern when evaluating the air quality impacts on and by development projects in the Bay Area. Other toxic air contaminants (TACs) are also of concern regionally. In the Bay Area, the majority of the estimated carcinogenic/chronic health risk from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (DPM, almost all of which is also PM_{2.5}). The California Air Resources Board (CARB) has

¹⁰ Bay Area Air Quality Management District (BAAQMD). *California Environmental Quality Act Air Quality Guidelines*. May 2017.

¹¹ BAAQMD. Air Quality Summary Reports. <http://www.baaqmd.gov/about-air-quality/air-quality-summaries>

identified DPM as being responsible for about 70 percent of the cancer risk in California from airborne TAC exposures¹².

The Project site, about 300 acres of open space (part of the former Patterson Ranch) adjacent to and east of Coyote Hills Regional Park, is proposed for public access improvement, habitat restoration and annexation to the Park. The nearest air-pollutant-sensitive receptors, a single-family residential area, lies several hundred feet east of the Project site at its closest approach and just east of Ardenwood Boulevard.

The air quality analyses addressing the Initial Study air quality checklist items above were performed using the methodologies and significance thresholds recommended in *CEQA Air Quality Guidelines* (BAAQMD, May 2017, Table 2-1). The air pollutant emissions of the ozone precursors ROG and NO_x, and of PM₁₀, and PM_{2.5} are evaluated. Health risks associated with Project construction DPM emissions in the context of cumulative health risks from TAC emissions by existing local sources are also evaluated.

The analysis assumed that the Project applicant (Park District) would obtain a BAAQMD permit if required for construction and that fugitive dust control BMPs would be routinely implemented by the construction contractor in accordance with Park District construction standards and as contained in the applicable Project Construction Documents.

According to the *Guidelines*, any project would have a significant potential for contributing to a local air quality standard violation or making a cumulatively considerable contribution to a regional air quality problem if its pollutant emissions would exceed any of the thresholds presented in **Table AQ-1** during project construction or operation.

Table AQ-1: CEQA Air Quality Significance Thresholds for Air Pollutant Emissions

Pollutant	Construction Average Daily (lbs./day)	Operational	
		Average Daily (lbs./day)	Maximum Annual (tons/year)
Reactive Organic Gases (ROG)	54	54	10
Oxides of Nitrogen (NO _x)	54	54	10
Inhalable Particulate Matter (PM ₁₀)	82 (exhaust)	82	15
Fine Inhalable Particulate Matter (PM _{2.5})	54 (exhaust)	54	10
PM ₁₀ /PM _{2.5} (Fugitive Dust)	BMPs ^a	N/A	N/A

Notes: BMPs = Best Management Practices
N/A = Not Applicable

^a If BAAQMD Best Management Practices (BMPs) for fugitive dust control are implemented during construction, the impacts of such residual emissions are considered to be less than significant.

Source: BAAQMD, *CEQA Air Quality Guidelines* (May 2017).

¹² California Air Resources Board (CARB). Summary: Diesel Particulate Matter Health Impacts. <https://ww2.arb.ca.gov/index.php/resources/summary-diesel-particulate-matter-health-impacts>

The *Guidelines* also establish a relevant zone of influence for assessment of project-level and cumulative health risk from TAC exposure to an area within 1,000 feet of a project site. Project construction-related or operational TAC impacts to sensitive receptors within the zone that exceed any of the following thresholds are considered significant:

- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e. chronic or acute) hazard index greater than 1.0;
- An incremental increase of greater than 0.3 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) annual average PM_{2.5}

Cumulative impacts from TACs emitted from freeways, state highways or high-volume roadways (i.e., the latter defined as having traffic volumes of 10,000 vehicles or more per day or 1,000 trucks per day) and from all BAAQMD-permitted stationary sources to sensitive receptors within the zone of influence that exceed any of the following thresholds are considered cumulatively significant:

- A combined excess cancer risk levels of more than 100 in one million.
- A combined non-cancer hazard index greater than 10.0.
- A combined incremental increase in annual average PM_{2.5} concentrations greater than 0.8 $\mu\text{g}/\text{m}^3$.

a) In the Bay Area, the current applicable regional air quality plan is the BAAQMD's *2017 Clean Air Plan: Spare the Air, Cool the Climate* (2017 Plan), which focuses on two closely-related goals: protecting public health and protecting the climate (the latter addressed in Section VII below). The 2017 Plan defines an integrated, multipollutant control strategy to reduce emissions of particulate matter, TACs, ozone precursors and greenhouse gases (GHG) based on four key priorities:

- Reduce emissions of criteria air pollutants and TACs from all key sources.
- Reduce emissions of "super-GHGs" such as methane, black carbon and fluorinated gases.
- Decrease demand for fossil fuels (i.e., gasoline, diesel and natural gas).
- Decarbonize the energy system.

The purpose of the Proposed Project is to improve public access and restore habitat on about 300 acres of adjacent land parcels east of the existing Coyote Hills Regional Park in southwest Alameda County. Thus, the Project would improve/expand regional parklands primarily to serve the recreational needs of Bay Area residents. It would not have the potential to substantially increase regional population, employment or transportation levels in Alameda County and the Bay Area, all of which are the bases of the 2017 Plan's regional emission inventories and the emission control policies they support. Thus, it would not impede attainment of 2017 Plan goals.

Also, compliance with all CEQA air quality significance thresholds are necessary conditions for determining that a project would not interfere with the attainment of air quality plan goals. As the analyses below under **Item b**, **Item c** and **Item d** demonstrate, the Project would not interfere with the 2017 Plan because it meets all CEQA limits on air pollutant emissions and their consequent health risks to the local population. Therefore, Project impacts to/conflicts with the 2017 Plan would be **less than significant**.

b) Project improvements to Park facilities and habitat restoration activities could occur over a three-year period (summer 2019 through summer 2021), or be spread out over more years depending on funding availability and capital project delivery capacity. During this time the Project would generate emissions of air pollutants in construction equipment exhaust and fugitive dust from equipment and material movement. The analysis described below assumed a worst-case (maximum daily emission) scenario in which all construction occurs over a three-year period. BAAQMD CEQA methodologies recommend

quantification of construction-related and operational emissions and comparison of those emissions to the CEQA significance thresholds. Thus, the California Emissions Estimator Model (CalEEMod, Version 2016.3.2, including, where appropriate, the independent use of its methodologies, as specified in its *User's Guide* Appendix A, and its default equipment emission rate tables, as specified in its *User's Guide* Appendix D) and the CARB's EMFAC on-road emission database were used for this purpose.^{13 14}

Table AQ-2 displays the estimated pollutant emissions from Project construction equipment and material delivery/haul trucks associated with Project access improvement and habitat restoration. The average daily construction emissions from this activity were compared to CEQA significance thresholds, which they do not exceed. Thus, the Proposed Project's construction related emissions would not substantially contribute to any existing air quality violation, and this impact would be *less than significant*.

Table AQ-2: Air Pollutant Emissions from Project Public Access Improvements and Habitat Restoration.

Restoration Area/ Work Period	Project Restoration Activity Emissions (average daily lbs.)			
	ROG	NO _x	Exhaust PM ₁₀	Exhaust PM _{2.5}
All Areas/Year 2019	0.45	5.92	0.21	0.19
All Areas/Year 2020	0.04	0.47	0.02	0.02
All Areas/Year 2021	0.19	2.28	0.08	0.08
BAAQMD Daily Threshold	54	54	82	54
Exceeds Threshold?	No	No	No	No

Source: Based on Project restoration phasing and equipment use data, equipment pollutant emission rates provided by the CalEEMod model, and on-road motor vehicle pollutant emission rates provided by the EMFAC2014 model.

Fugitive dust from earth movement and travel over unpaved ground during Project improvement/restoration phases could lead to local violations of ambient particulate standards unless adequate dust suppression measures are implemented. For CEQA projects in the Bay Area, BAAQMD Guidelines require the implementation basic construction BMPs to control fugitive dust. These same BAAQMD Guidelines are included in the City of Fremont's Standard Development Requirements contained in Municipal Code Section 18.218.050. Through implementation of the following BMPs contained in Mitigation Measure AIR-1, potential fugitive dust impacts would reduced to a *less-than-significant* level with implementation of the following mitigation measures.

Mitigation Measure

AIR-1 The following Best Management Practices (BMPs) shall be included in the Project construction dust/emission control plan with a designated contact person for on-site implementation:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

¹³ California Air Pollution Control Officers Association (CAPCOA). *California Emissions Estimator Model (CalEEMod) User's Guide*. <http://www.caleemod.com/>

¹⁴ CARB, EMFAC Web Database. <https://www.arb.ca.gov/emfac/>

- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 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.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The EBRPD’s phone number shall also be visible to ensure compliance with applicable regulations.

Table AQ-3 displays the estimated pollutant emissions from Project operational sources added by Project implementation, in this case the additional motor vehicle traffic associated with the operation of the larger Coyote Hills Regional Park. Both the average daily and total annual pollutant emissions in the first year after Project improvement/restoration work is complete (i.e., Year 2021) were compared to CEQA significance thresholds, which they do not exceed. Thus, the Proposed Project’s net new operational emissions would not substantially contribute to any existing air quality violation, and this impact would be less than significant.

TABLE AQ-3: Air Pollutant Emissions from Operations after Project Public Access Improvements and Habitat Restoration.

Project Source/Year	Project Operational Emissions (average daily lbs./maximum annual tons)			
	ROG	NO _x	Total PM ₁₀	Total PM _{2.5}
Motor Vehicles/Year 2022	1.46/0.07	8.80/0.49	4.49/0.2 4	1.24/0.0 7
BAAQMD Daily Threshold	54/10	54/10	82/15	54/10
Exceeds Threshold?	No	No	No	No

Source: Based on Project restoration phasing and equipment use data, equipment pollutant emission rates provided by the CalEEMod model, and on-road motor vehicle pollutant emission rates provided by the EMFAC2014 model.

- c) As discussed in Item b above, Project construction and operational air pollutant emissions would be substantially below the CEQA emission significance thresholds. And as discussed below in Item d, Project TAC impacts would also be below the CEQA project-level risk/hazard thresholds and below the cumulative risk/hazard thresholds. Therefore, the Project would not make cumulatively considerable contributions to the Bay Area’s regional problems with ozone and particulate matter, or to local cumulative TAC exposures. Thus, cumulative emission impacts would be **less than significant**.
- d) Cancer risk is the lifetime probability of developing cancer from exposure to carcinogenic substances. Following health risk assessment (HRA) guidelines established by the Office of Environmental Health Hazard Assessment (OEHHA) in Air Toxics Hot Spots Program Risk Assessment Guidelines (2015) and by the BAAQMD in Recommended Methods for Screening and Modeling Local Risks and Hazards (2012), incremental cancer risks are estimated by applying established toxicity factors to modeled TAC concentrations over a 70-year lifetime exposure. If the probability of cancer mortality is greater than 10 in

a million, then the impact is considered significant. Adverse health impacts unrelated to cancer are measured using a hazard index (HI), which is defined as the ratio of a project's incremental annual average TAC exposure concentration to a published reference exposure level (REL) as determined by OEHHA. If the HI is greater than 1.0, then the impact is considered to be significant. Both of these thresholds have been adopted by the BAAQMD Guidelines¹⁵ ¹⁶.

The potential for ambient DPM produced by diesel-powered construction equipment employed for Project improvement/restoration activities to substantially affect sensitive receptors within 1,000 feet of the Project site was estimated by using the SCREEN3 dispersion model. Project DPM cancer risk, chronic hazard and PM2.5 increments at the closest residential area to the Project site are as shown in **Table AQ-4**, all values far below the significance thresholds. Thus, project-level TAC impacts from Project construction equipment/vehicular DPM emissions would be less than significant ¹⁷.

According to the Google Earth mapping of BAAQMD stationary TAC source locations in southwestern Alameda County, there is a substantial cluster of TAC sources in the Ardenwood Technology Park just east of the Project site and just south of the nearest residential area. Also, Paseo Padre Parkway (with a 2010 daily traffic volume of about 11,000 according to the Fremont General Plan) would qualify as a substantial TAC source under BAAQMD criteria. TAC cancer risk, chronic hazard and PM2.5 increments from all such stationary sources and from Paseo Padre traffic were accessed from BAAQMD data files or estimated using the BAAQMD Roadway Screening Calculator, as shown in **Table AQ-4**. Thus, cumulative TAC impacts from Project and existing stationary/mobile sources contribute to local cancer risks and ambient PM2.5 concentrations that are low in comparison to the BAAQMD cumulative CEQA significance thresholds and their cumulative impacts would be less than significant ¹⁸ ¹⁹ ²⁰.

¹⁵ Office of Environmental Health Hazard Assessment (OEHHA). *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, February 2015.

¹⁶ BAAQMD. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. May 2012.

¹⁷ Lakes Environmental, *SCREEN View User's Guide*.

https://www.weblakes.com/products/screen/resources/lakes_screen_view_user_guide.pdf

¹⁸ BAAQMD. Roadway Screening Analysis Calculator. <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools>

¹⁹ BAAQMD. Stationary Source Screening Analysis Tool. <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools>

²⁰ BAAQMD. Highway Screening Analysis Tool. <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools>

TABLE AQ-4: Air Pollutant Emissions from Project Operation after Implementation of Public Access Improvement/Habitat Restoration.

BAAQMD Plant #	Facility	Address	Cancer Risk	Hazard Index	PM _{2.5} Concentration
From Local BAAQMD-Permitted Stationary TAC Sources*					
20817	34175 Ardenwood Venture, LLC	34175 Ardenwood Blvd.	1.39	0.002	0.002
20638	Boehringer Ingelheim Fremont Inc.	6397 Kaiser Drive	6.08	0.004	0.007
18648	Zosano Pharma	34790 Ardentech Court	4.41	0.002	0.006
12086	OMRON STI	6550 Dumbarton Circle	3.39	0.003	0.004
20365	Peery/Arrillaga	6519 Dumbarton Circle	1.70	0.002	0.002
From Major Local Roadways**					
Paseo Padre Parkway (25 feet from curbside)			10.07	< 0.01	0.198
From Project Sources***					
Project Improvement/Restoration (i.e., TAC emissions from the Patterson Slough parcel, the only Project parcel within 1000 feet of local sensitive receptors)			0.05	< 0.01	0.01
Project-Level Significance Thresholds			10	1.0	0.3
Significant Project Construction Impact?			No	No	No
From Cumulative Sources					
Worst-Case Cumulative TAC Impact****			27.04	0.013	0.219
Cumulative Significance Thresholds			100	10	0.8
Significant Cumulative Impact?			No	No	No

*Data from the BAAQMD's Stationary Source Screening Analysis Tool and Google Earth were used to estimate the maximum cancer risk, hazard index, and PM_{2.5} concentration at maximum exposure receptor points very close to each TAC source. All stationary TAC sources are located in the Ardenwood Technology Park and are within 1000 feet of the closest residential areas north/east of Ardenwood Boulevard.

**The BAAQMD's Roadway Screening Analysis Calculator were used to estimate maximum cancer risks, hazard indexes, and PM_{2.5} concentrations at curbside. Daily traffic volumes on Paseo Padre Parkway were taken from the City of Fremont General Plan Mobility Element, Diagram 3-2, 2010 Traffic Volumes.

***Project construction cancer risk, chronic hazard and PM_{2.5} increments were estimated by the SCREEN3 dispersion model using Project construction equipment TAC emission estimates from the CalEEMod model.

****Table entries for each stationary and roadway source cancer risk, chronic hazard and PM_{2.5} increments are worst-case values at a receptor point close to each source; actual values at the closest residential receptor would be substantially reduced by TAC dispersion over the much greater source-receptor distances.

- e) BAAQMD defines a significant odor impact as the frequent exposure of substantial populations to objectionable odors. The diesel-powered, exhaust-emitting equipment to be used for the proposed improvement/restoration work would work over large-area parcels that are far removed (i.e., by at least 1000 feet, often much greater) from existing residential areas where odor-sensitive populations could be frequently affected. Thus, odor impacts associated with the operation of diesel-powered equipment to be used for Project improvement/restoration work would be **less than significant**.

	Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
IV. 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comment to Questions

- a) The proposed project could have a **potentially significant** impact on Special Status species, which will be evaluated in the EIR.
- b) The proposed project could have a **potentially significant** impact on habitats, which will be evaluated in the EIR.
- c) The proposed project could have a **potentially significant** impact on wetlands, which will be evaluated in the EIR.
- d) The proposed project could have a **potentially significant** impact on fish and wildlife movement, which will be evaluated in the EIR.
- e) The proposed project could have a **potentially significant** on local policies and ordinances protecting biological resources, which will be evaluated in the EIR.
- f) The proposed project could have a **potentially significant** impact on habitat or conservation plans applicable to the site. This topic will be evaluated in the EIR.

Mitigation Measures

Mitigation Measures, if necessary, will be identified in the EIR.

	Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comment to Questions

- a) The proposed project would disassemble the Contractors Residence a historic building. This is a **potentially significant** impact on historic architectural resources, and will be evaluated in the EIR.
- b) The proposed project would involve ground disturbance including grading and trenching on a site with known archaeological resources, including potential human remains. This is a **potentially significant** impact on archaeological resources, and will be evaluated in the EIR.
- c) The proposed project would involve ground disturbance including grading and trenching on a site underlain by the Franciscan Formation, which may contain fossil remains. This is a **potentially significant** impact on paleontological resources, and will be evaluated in the EIR.
- d) The proposed project would involve ground disturbance including grading and trenching on a site with known archaeological resources, including potential human remains. This is a **potentially significant impact** on human remains, and will be evaluated in the EIR.

Mitigation Measures

Mitigation Measures, if necessary, will be identified in the EIR.

	Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
VI. 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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comment to Questions

a. i. The project site is located in a seismically active area, the San Francisco Bay Area, which is located in the vicinity of the San Andreas Fault System at the margin between the Pacific Tectonic Plate and the North American Tectonic Plate. The San Andreas Fault System includes major active earthquake faults including the Hayward fault located approximately 6 miles northeast of the project site, the Calaveras fault 12 miles east, and the San Andreas fault 13 miles to the southwest. No active earthquake faults are known to cross the subject property, so that surface fault rupture is considered to have **no impact** to site use or improvements.

a. ii. Earthquakes which occur along or near one of the active earthquake faults in the region could impact the site due to the effects of strong seismic groundshaking. Peak ground accelerations at the project site are estimated to be on the order of 54% that of gravity (g) with a 10 percent chance of exceedence in a 50 year period. Ground accelerations of this magnitude could result in significant damage to unreinforced structures or buildings. Current Building Codes, including the 2016 California Building Code which has been adopted by the City of Fremont and County of Alameda, require new structures to be designed to resist the effects of strong seismic ground shaking. Repurposing existing structures for active use with human occupants could have a potentially significant impact if structures were to be damaged or fail during strong seismic ground shaking. New structures at the site should be designed in accordance with current California Building Codes. Repurposing of existing structures should include an evaluation by a Structural Engineer and may require retrofitting of structures with earthquake resistant measures. Strong ground shaking is considered to be **less than significant with mitigation**.

Incorporation of seismic construction standards and retrofitting of existing susceptible structures would reduce the potential for catastrophic effects of ground shaking, such as complete structural failure, and would reduce the impact of strong seismic ground shaking to a level of less-than-significant.

Implementation of Mitigation Measure GEO-1 would reduce the impact of strong seismic ground shaking to a level of **less than significant**.

- a. iii. Another effect of seismic activity is the potential for seismic related ground failure, including liquefaction and dynamic densification. During and following strong seismic groundshaking, low density silty sand and poorly-graded sand deposits can undergo settlement. Liquefaction occurs when water saturated sand deposits lose strength due to a loss of pore pressure. Liquefaction settlement generally occurs gradually over the following days and weeks. Dynamic densification occurs when dry sand and silty sand deposits settle during strong seismic groundshaking.

According to maps prepared by the USGS, soils in the project area have a high to extremely high susceptibility to liquefaction due to seismic shaking. The Seismic Hazard Zones Map of the Newark Quadrangle (California Geological Survey, July 2, 2003) shows the site as being in an area 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 Public Resources Code Section 2693(c) would be required. A liquefaction analysis of project area soils was performed by TerraSearch Inc. in January 2008 in a report prepared for previously planned subdivisions. In their report, they estimated seismically induced settlement at the project area to be up to 8 inches. Across most of the project area, settlements of between 2 to 4 inches can be expected in the liquefiable layers. However, settlements of up to 5 inches can be expected in the northwestern most portion of the project area near Crandall Creek (K-line channel) and Ardenwood Creek (P-line channel), and up to 7 inches in the area near Patterson Ranch Road, identified as a possible old stream channel. Settlement of this magnitude could cause damage to existing and new structures, levees, parking facilities and other improvements at the project site. Project specific mitigation measures will be developed in accordance with requirements of the Public Resources Code.

Mitigation Measure GEO-2 would reduce the impact of seismic-related ground failure, including liquefaction, to a level of **less than significant**

- a. iv. The project area is located on nearly level (slope less than 2 percent) alluvial, with a relief of only about ten feet throughout the area. Natural slope instability does not occur at such low gradients. Landslides have **no impact** to site use or improvements.
- b. Proposed improvements to the site include grading of roads, trails, construction of new parking lot areas, pedestrian bridges, restroom, kiosk, utility trenching, rehabilitation of existing structures, possible removal of some structures, continued agricultural activities, wetlands restoration and areas of replanting. Areas to be graded and altered during construction and restoration activities could be subjected to soil erosion by wind and water. Site soils have a low erosion hazard due to their cohesiveness and gentle slopes. All projects that will disturb or alter more than one acre in area are subject to the requirement to reduce the potential impact of soil erosion by developing and implementing a Storm Water Pollution Prevention Plan (SWPPP) and Erosion Control Plan developed in accordance with permitting requirements with the State Water Resources Control Board. The SWPPP shall include Best Management Practices (BMPs) for control of soil erosion and sedimentation and shall be prepared by a Qualified SWPPP Developer (QSD). With the implementation of Mitigation Measure GEO-3, soil erosion or the loss of topsoil would be reduced to a level of **less than significant**.
- c. As discussed above in a. iii., the soils underlying the site are subject to the effects of liquefaction and could settle following strong seismic ground shaking. Lateral spreading could occur in areas with liquefiable soils located adjacent to a stream channel or slough, such as soils located adjacent to the Crandall Creek (K-line channel) and Ardenwood Creek (P-line channel). Project specific mitigation measures will be developed in accordance with requirements of the Public Resources Code. The impact of being located on a soil unit that is unstable or could become unstable and result in lateral spreading and liquefaction is considered **less-than-significant impact with implementation of Mitigation Measures GEO-2 and GEO-4**.
- d. Expansive soils are present at the project site area. Seasonal expansion and contraction of site soils could damage site improvements such as foundations, concrete slabs, pathways, and other pavement areas.

Expansive soils can be mitigated by including design measures such as removal and replacement with non-expansive soils, segregating expansive soils from overlying improvements, lime-treating expansive soils to reduce the expansiveness, and increasing the thickness of non-expansive construction materials such as Class 2 Aggregate Base between the expansive soil and overlying concrete and hot mix asphalt improvements. The impact of expansive soils is considered **less-than-significant** with Mitigation Measures GEO-1 through GEO-4.

- e. There are no planned on-site wastewater disposal systems at the project site. The planned restroom will be connected to the sanitary sewer system. The impact of soils incapable of supporting septic tanks or alternative wastewater disposal systems is **less-than-significant**.

Mitigation Measures

GEO-1 Strong Seismic Ground Shaking. Any construction built as a result of the implementation of the project shall meet requirements of the current California Building Code Vol. 1 and 2, including the California Building Standards, current edition, published by the International Conference of Building Officials, and as modified by the amendments, additions and deletions as adopted by the City of Fremont, California. Structures already present at the site and planned for reuse as part of the project should be evaluated for seismic stability in accordance with Fremont General Plan Policy 10-2.5: Removal of Susceptible Structures, and Implementation 10-2.5.A: Seismic Retrofit Programs.

GEO-2 Seismic-related Ground Failure, including Liquefaction. Design-level Geotechnical recommendations shall be prepared for the Project under the direction of a California Registered Geotechnical Engineer, or Registered Civil Engineer experienced in geotechnical engineering. The Geotechnical recommendations shall be based on the information developed for the site and shall establish the seismic design parameters, as determined by the geotechnical engineer or civil engineer in accordance with requirements of the California Building Code, for improvements to the project site. The Geotechnical recommendations and design plans shall identify specific mitigation measures to reduce the liquefaction potential of surface soils in areas where liquefaction would pose a risk to health and safety in accordance with Public Resources Code Section 2693 (c).

GEO-3 Soil Erosion and Loss of Topsoil. In accordance with the Clean Water Act and the State Water Resources Control Board (SWRCB), the applicant for any construction projects that disturb more than one acre shall file a Storm Water Pollution Prevention Plan (SWPPP) prior to the start of construction. The SWPPP shall include specific best management practices to reduce soil erosion. This is required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit).

Additionally, construction activities planned as a result of the implementation of the plan shall require an Erosion Control Plan to be submitted to the City of Fremont in conjunction with a Grading Permit Application. The Plan shall include winterization, dust, erosion and pollution control measures conforming to the California Stormwater Quality Association (CASQA) Best Management Practices handbooks, with sediment basin design calculations. The Erosion Control Plan shall describe the "best management practices" (BMPs) to be used during and after construction to control pollution resulting from both storm water and construction water runoff. The Plan shall include locations of vehicle and equipment staging, portable restrooms, mobilization areas, and planned access routes.

Recommended soil stabilization techniques include placement of straw wattles, silt fences, berms, and gravel construction entrance areas or other control to prevent tracking sediment off-site onto city streets and into storm drains, as well as hydroseeding or planting of all disturbed areas.

GEO -4 Unstable Geologic Units and Expansive Soils. Proper foundation engineering and construction of any structures built as a result of implementation of the project shall be performed in accordance with

the recommendations of a Registered Geotechnical Engineer or Civil Engineer experienced in geotechnical design and a Registered Structural Engineer or Civil Engineer experienced in structural design. Geotechnical recommendations shall address zones of potentially liquefiable or expansive soil as they relate to proposed improvements and provide foundation, road pavement section, concrete slab-on-grade, utility construction and other recommendations to mitigate any zones encountered.

The structural engineering design shall incorporate seismic parameters as outlined in the current California Building Code. The Geotechnical recommendations shall establish the seismic design parameters, as determined by the geotechnical engineer in accordance with requirements of the current California Building Code.

Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
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VII. GREENHOUSE GAS EMISSIONS: Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Comment to Questions

The most important and widely occurring anthropogenic greenhouse gas (GHG) is carbon dioxide (CO₂), primarily from the use of fossil fuels like coal, petroleum or natural gas. Also important GHGs are methane (CH₄), a principal component of natural gas, and nitrous oxide (N₂O). Fertilizer use and agriculture contribute substantial CH₄ and N₂O emissions, which are more potent than CO₂ as anthropogenic drivers of climate change. Other anthropogenic activities such as deforestation and other changes in land use contribute to rising atmospheric GHG levels.

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, increased forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

Executive Order S-3-05 was established by Governor Arnold Schwarzenegger in June 2006 established the following statewide emission reduction targets through the year 2050:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels;
- By 2050, reduce GHG emissions to 80% below 1990 levels.

AB 32, also known as the California Global Warming Solutions Act of 2006 designates the California Air Resources Board (CARB) as the State agency charged with monitoring and regulating sources of emissions of GHGs. Under AB 32, the State board is required to approve a statewide GHG emissions limit equivalent to the statewide GHG emissions level in 1990 to be achieved by 2020 and to adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG emissions reductions. The law establishes periodic targets for reductions, and requires certain facilities to report emissions of GHGs annually.

The BAAQMD *CEQA Air Quality Guidelines* provide CEQA thresholds of significance for operational GHG emissions from land use projects: 1) 1,100 metric tons of CO₂e per year; or 2) 4.6 metric tons of CO₂e per year per project “service population” (i.e., project residents + project employees), which are also considered the definition of a cumulatively considerable contribution to the global GHG burden and, therefore, of a significant cumulative impact. The BAAQMD has not defined thresholds for project construction GHG emissions. The *Guidelines* methodology and thresholds of significance have been used in this Initial Study’s analysis of potential GHG construction and operational impacts associated with the Project.

- a) The California Emissions Estimator Model (CalEEMod, Version 2016.3.2) model was used to quantify GHG emissions associated with Project construction activities and new operational sources. The Project's estimated improvement/restoration activity GHG emissions would be at its maximum annual total during the year 2019 (about 131 metric tons) with substantially lesser amounts in the subsequent two years (about 14 metric tons in 2020 and about 63 metric tons in 2021).

After completion of the proposed improvement/restoration work, net new operational GHG emissions would come primarily from the additional motor vehicles transporting increased numbers of visitors to the expanded Park. In the first year of operation after expansion, such motor vehicles would emit about 284 metric tons of GHG. Since both construction and operational GHG emissions are below the CEQA GHG significance threshold, GHG emissions associated with the Project would be **less than significant**.

Energy

Construction of the proposed project would require energy use by construction equipment. Project construction would employ modern equipment that complies with all applicable energy standards, and could be served by existing local and regional energy supplies, without substantially affecting peak and base period demands for electricity. For these reasons, construction energy use would not be wasteful or inefficient. Project construction would not require new or expanded electric power, natural gas, or telecommunications facilities.

Energy used during construction of the project would allow improvements to the San Francisco Bay trail along Ardenwood Boulevard and Paseo Padre Parkway, which could increase trail use for non-motorized transportation and result in a reduction of long-term energy consumption.

Operation of the proposed recreational project, which would occur from sunrise to sunset, would have directly consume a modest amount of energy. There would be a relatively small increase in visitor use and vehicle trips after construction of the project. To the extent that the Project's nearby recreational facilities attract visitors that would otherwise travel to more-distant parks and recreational facilities, there would be a net reduction in energy use for these vehicle trips. In any case, the Project's indirect transportation-related energy use during operation would not be large. Project operation would not require new or expanded electric power, or natural gas, or telecommunications facilities.

No features of the Proposed Project would conflict with or obstruct state or local plans for renewable energy or energy efficiency. The project would not require the relocation or construction of new or expanded electric power or natural gas facilities.

For these reasons, the impact of the proposed project on energy would be less than significant.

- b) By meeting the CEQA significance thresholds, the Project would not conflict with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions in California and the Bay Area and, thus, would have a **less than significant** impact.

Mitigation Measures

N/A

	Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
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VIII. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comment to Questions

- a) The proposed project is a park development plan that would not involve the transport, use or disposal of substantial quantities of hazardous materials. No hazardous materials would be stored in the project area in support of the project, other than typical consumer-related products, such as cleaning solvents. Most of these materials would be consumed during use. The limited amounts of hazardous materials would be labeled to inform users of potential risks and to instruct them in appropriate handling, storage, and disposal procedures. None of the proposed uses are associated with the routine transport of substantial quantities of hazardous materials that could spill and create a significant hazard to the public or the environment. This impact would be **less than significant**.
- b) A report on hazardous materials at the project site was conducted by TRC, an independent consultant.²¹ The report was based on technical studies prepared by others, including a Site Characterization Report/Preliminary Endangerment Assessment (conducted in 2008), a Human Health Risk Assessment

²¹ TRC, Existing Conditions Summary Report, Hazardous Materials, Patterson Ranch Habitat Project, Fremont, California, prepared for East Bay Regional Park District, c/o Questa Engineering Corporation, April 2017.

(2013), a Phase I Environmental Site Assessment (ESA) (2014), a Deed Restriction and Declaration of Covenants for the site (2014), and soil sampling and testing in the Southern Wetland Natural Unit at the project site (2015). The conclusions of the TRC report are discussed below.

Based on the Site Characterization Report/Preliminary Endangerment Assessment conducted in 2008, TRC determined that detected heavy metal concentrations in the samples tested, including arsenic, were consistent with published background levels and not a result of historical operations at the site. Detected hydrocarbons (TPH) and polynuclear aromatic hydrocarbons (PAHs) did not exceed applicable background or screening levels. Due to the historic agricultural crop production at the site, residual organochlorine pesticide concentrations, including but not limited to toxaphene and dieldrin, were present in surface and near-surface soil. Toxaphene and dieldrin were detected in the upper 12 inches of soil at various locations across the site at concentrations that exceed residential criteria.

Organochlorine pesticides are known to degrade, over time, into benign substances. Soil samples from the Southern Wetland Natural Unit at the project site were tested in 2015, seven years after the test results discussed above. TRC determined that none of these detected organochlorine pesticide concentrations exceeded respective Los Alamos National Laboratory (LANL) ecological screening benchmarks (ECORISK Database), which were selected as a screening tool because no California ecological screening levels have been established for the full range of pesticides detected at the site. Because organochlorine pesticide residues throughout the project site result from the same historic agricultural crop production, it is likely that the conclusions for the Southern Wetland Natural Unit are applicable to the remainder of the project site, and that current pesticide concentrations in the Western Wetlands Natural Unit, proposed for restoration, also do not exceed LANL benchmarks. However, the soils in the Western Wetlands Natural Unit should also be tested to verify LANL benchmarks for soil and/or sediment are not exceeded.

During project construction (earthmoving and grading), construction workers may be exposed to contaminated soil, which could affect their health. Workers would disturb soils potentially contaminated with agricultural chemicals, releasing them locally in dust in the air, absorbing them through respiration, and physically coming into contact with contaminated soils, potentially absorbing them through contact. After construction, likely ecological receptors, including insectivorous birds and mammals, could be exposed to excessive levels of pesticide residues. The impact of contaminated soils on construction workers and ecological receptors would be reduced to a **less-than-significant** level with implementation of Mitigation Measures HAZ-1 through HAZ-6.

Improperly decommissioned and/or abandoned groundwater wells can act as direct conduits to groundwater for agricultural wastes or other pollutants that are washed down with stormwater runoff. There are eight known or suspected abandoned and nonfunctioning wells within the park expansion project area, or immediately adjacent to it. Some of the abandoned wells have no surface infrastructure, such as a standpipe or pump, and are difficult to locate in the field. Their approximate locations are based on Alameda County Water District (ACWD) records. As part of the proposed project, the Park District would coordinate with ACWD to confirm the location of abandoned wells, identify any previously unknown abandoned wells, and develop and implement plans to destroy these abandoned wells following applicable ACWD permitting regulations and destruction guidelines. Well destruction would involve pulling well pumps and casings and any aboveground stand pipes and grouting the wells closed. These measures, which are part of the proposed project, would reduce the impact of abandoned wells to a **less-than-significant** level.

A Site Characterization Report/Preliminary Endangerment Assessment (PEA) conducted in 2008 found asbestos in the sheetrock of the structures on the project site, which include the Farm Labor Contractors

residence.²² A building inspection report conducted in 2016 also found asbestos in various building materials.²³ In addition, the 2016 building inspection report found detectable levels of lead-based paint on the Contractors residence and other structures on the site. Disassembly of the Labor Contractors residence, or other structures on the project site, could expose workers and visitors to hazardous levels of airborne asbestos and lead-based paint. Implementation of Mitigation Measure HAZ-6 would reduce the impact of asbestos and lead-based paint to a less-than-significant level.

The historic Contractors Residence and the now-demolished Farm Labor Housing buildings on the site were constructed with septic tanks and leachfield wastewater disposal systems. As part of the proposed project, and in accordance with Alameda County Onsite Wastewater Treatment System Code, Section 9, these systems would be field-located, abandoned, and destroyed. This would involve removing the septic tank lid, pumping the tank chambers, perforating the tank bottom, and backfilling the tank with pea gravel or drain rock and topsoiling. Leach lines normally do not need to be removed. This work, which would be done under a County-issued permit, and is proposed as part of the project, would reduce the impact of septic tanks and leachfield wastewater disposal systems to a *less-than-significant* level.

- c) The project area is within 0.25 mile of an existing school site. The closest school to the project area is the Delaine Eastin Elementary School, located at 34901 Eastin Drive, approximately 2,000 feet north of the project area. The proposed project's recreational and open space uses would not entail the routine use, transport, or disposal of hazardous materials as part of its operations. However, as discussed in Section VII.b, above, hazardous levels of organochlorine pesticides and asbestos-containing building materials on the project site may be disturbed by project construction. Implementation of Mitigation Measures HAZ-1, HAZ-2, HAZ-3, HAZ-4, HAZ-5, and HAZ-6 would reduce the impact of contaminated soils and asbestos-containing building materials on nearby schools to a *less-than-significant* level.
- d) The project area is not located on or near a site listed in federal or state databases of major hazardous release sites (e.g. Superfund sites), pursuant to Government Code Section 65962.5.²⁴ There would be *no impact*.
- e, f) The project area is not located in an airport land use plan or in the vicinity of a public or private airport and therefore would not create impacts associated with airplane traffic. There would be *no impact*.
- g) The project would not impair implementation of, or physically interfere with, an adopted emergency response or evacuation plan. The project would not affect the functionality of existing emergency evacuation routes, nor would project traffic be expected to adversely impact a designated evacuation route. Thus, the project would not impede implementation of the City of Fremont's Disaster Management Operations Plan (DMOP). The project would also not involve the establishment of an evacuation route. As such, the project would not alter an existing emergency response plan or evacuation route and therefore would not impact existing emergency procedures. This impact would be *less-than-significant*.
- h) The expansion area is bordered on the west by Coyote Hills Regional Park, on the north by Alameda Creek, on the east by Paseo Padre Parkway and existing and planned development, and on the south by undeveloped privately-owned land. The LUP Amendment proposes new visitor facilities including entry

²² City of Fremont, Final Environmental Impact Report, Volume I – Modified Recirculated Draft EIR, State Clearing-house #2007102107, Patterson Ranch Planned District, September 2010, Section 4.9 Hazards and Hazardous Materials.

²³ Hazard Management Services, Inc., Letter Report to Karla Cuero, Project Coordinator, East Bay Regional Park District, October 11, 2016.

²⁴ California Department of Toxic Substances Control, EnviroStor database, available online at: http://www.envirostor.dts.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES,OPEN,FUDS,CLOSE&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST, accessed 27 April 2018.

kiosk, restroom, parking lot, and picnic area, and re-use of the existing Milk House, which could potentially result in an increased risk of wildland fires to people and structures.

Coyote Hills Regional Park is adequately served for fire suppression by the Fremont Fire Department, which is able to meet its performance standard to respond to emergency calls at the Park.

The project site is not classified as a very high fire hazard severity zone in state or local responsibility areas, as defined by the California Department of Forestry and Fire Protection (CAL FIRE).²⁵

The project site would be added to the existing Coyote Hills Regional Park and managed by the East Bay Regional Park District, which maintains a program of fire prevention and suppression, and would continue to coordinate these efforts, including grassland vegetation management activities like goat and sheep grazing and prescribed burns, to help control the build-up of flammable vegetation at the project site.

EBRPD would monitor weather and fire conditions to aid in preventing wildfires, and could temporarily close Coyote Hills Regional Park, including the expansion area, in especially dry and windy conditions. All new Park District facilities would include on-site fire protection, like alarms and sprinkler systems, in accordance with City codes.

The Park District's program of fire prevention and suppression at the Park is primarily accomplished through goat and sheep grazing. In grassland areas, goat and sheep grazing has been effective at reducing the volume of dried plant material, which acts as fuel, to fire-safe levels. Fuel reduction in the Park can reduce the probability that a wildfire, if ignited, would burn uncontrolled or move off the site, and reduce the risk posed by wildfire to people, property and other resources. In addition, by reducing the volume of fuel, the intensity of a fire entering a grazed area can be reduced, which may increase firefighters' ability to control the fire.

In areas where grazing is unable to achieved desired results, the Park District may use prescribed burning. EBRPD incorporates fire-safety measures into its prescribed burn operations to minimize the potential that a controlled burn would expose people or structures to significant risk. The EBRPD Fire Department conducts at least six prescribed burns every year on its property, including several hundred acres of summer and fall grassland burns. Burns are designed to meet specific land management objectives, such as fire hazard reduction, grassland restoration, or reduction of non-native or pest plant species occurrence. All prescribed burns are conducted under controlled conditions and during weather conditions that are conducive to smoke dispersal.

Prior to conducting a prescribed burn for a particular site, the EBRPD Fire Department writes a burn plan which is reviewed and approved by the Park District's Operations and Planning and Stewardship Departments, as well as by the California Department of Forestry and Fire Protection and the Bay Area Air Quality Management District. Each plan includes a detailed project description including: the fuel type to be burned, required weather prescription, detailed site map, firing techniques, smoke management plan, list of fire department resources needed during the burn day, and public notifications and safety considerations.

Prior to burning, existing control lines, such as paved roads and fire roads, are enhanced with temporary control lines. Personnel used to supervise the burn, perform the actual firing, staff the fire engines, and control and extinguish the flames are all fully trained and briefed. Smoke production and weather

²⁵ California Department of Forestry and Fire Protection, *California Fire Hazard Severity Zone Map Update Project*, available online at: http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps, accessed 30 April 2018.

conditions are continuously monitored throughout the burn, and all burning material is completely extinguished at the end of each day. These fire-safety measures are followed for every prescribed burn.

The proposed Project would not result in substantial impacts to emergency access. It would not create new barriers to emergency vehicles. The Project would provide additional site access with new bicycle and pedestrian facilities that can be utilized by emergency vehicles, but these facilities would not exacerbate fire risk. Emergency access on existing streets within and adjacent to the site would not be affected. The project site does not have substantial slopes, prevailing winds, or other factors that would exacerbate wildfire risks and thereby expose visitors to substantial pollutant concentrations from wildfire. Because there are no substantial slopes on the project site, there would not be a significant risk due to post-fire slope instability or drainage changes.

With inclusion of the project site into Coyote Hills Regional Park and implementation of the Park District fire management measures discussed above, the impact of wildfire intensity and risk would be reduced to a *less-than-significant* level.

Mitigation Measures

- HAZ-1: Soil Testing and LANL Benchmarks.** The Park District shall conduct sampling and testing of surface and near-surface soils in the areas of the Western Wetlands Natural Unit that are proposed for wetland restoration. The sampling and testing program shall include concentrations of pesticide residues, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endrin, endrin aldehyde, delta-BHC, chlordane (alpha and gamma), endosulfan (I and II), endosulfan sulfate, methoxychlor, and toxaphene. The test results shall be compared to the ecological screening benchmarks for soil and sediment (ECORISK Database) developed by Los Alamos National Laboratory (LANL). If no samples exceed the respective LANL benchmarks, no further mitigation is required.
- HAZ-2: Ecological Risk Assessment.** Using the results of testing for organochlorine pesticides from Mitigation Measure HAZ-1, the Park District shall conduct a focused ecological risk assessment to evaluate the effects of known concentrations of pesticide residues, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endrin, endrin aldehyde, delta-BHC, chlordane (alpha and gamma), endosulfan (I and II), endosulfan sulfate, methoxychlor, and toxaphene, relative to likely ecological receptors at the site, particularly insectivorous birds and mammals. If the predictive ecological assessment identifies significant risk, Mitigation Measures HAZ-3, HAZ-4, and HAZ-5 shall be implemented. If the predictive ecological assessment does not identify significant risk, no further mitigation is required.
- HAZ-3: Site-Specific Health and Safety Plan.** If the assessment described in Mitigation Measure HAZ-2 identifies significant risk, a Site-Specific Health and Safety Plan for construction workers shall be prepared by the Park District and approved by an industrial hygienist prior to the start of any earthmoving activities associated with the alternative remediation strategies. The site-specific Health and Safety Plan shall be implemented by the Construction Contractors during remediation work. The Site-Specific Health and Safety Plan shall be prepared in accordance with the California Division of Occupational Safety and Health (CAL/OSHA) Standards identified as part of Title 8 of the California Code of Regulations.
- HAZ-4: Site-Specific Air Quality Monitoring Plan.** If the assessment described in Mitigation Measure HAZ-2 identifies significant risk, an Air Quality Monitoring Plan shall be prepared by the Park District and approved by the California Department of Toxic Substances Control (DTSC) and/or other regulatory oversight agency or agencies reviewing the remediation of the project area, prior to the start of any earthmoving activities associated with remediation strategies. The Air Quality Monitoring Plan shall be implemented by the Construction Contractors during remediation work in order to prevent toxic dust in the air from reaching levels that are hazardous to the workers and/or surrounding residents.

The Air Quality Monitoring Plan shall be prepared in accordance with the CAL/OSHA Standards identified as part of Title 8 of the California Code of Regulations.

HAZ-5: Soil Remediation. Contaminated soil shall be excavated and disposed offsite at a permitted Class II or Class III disposal facility, if required. Alternatively, soils with very low levels of contamination that do not pose a human health risk could be used beneficially as fill below paved parking areas or areas that receive aggregate base as a capping. Remediation shall include confirmation samples from excavations within remedial areas to limit the volume removed and verify that identified contaminated soil has been removed from the site. Adequate dust mitigation measures during excavation shall be implemented, and may include, but are not limited to, application of water and dust suppressants helps to control airborne particles, restrictions and/or limits to soil movement procedures, use of personal protective equipment (PPE), respirators, and decontamination procedures to reduce potential exposure to and spreading of contaminants. Truck cleaning shall include dry brushing after loading and using wheel grates to knock off excess dirt upon exiting the site. Soil loads in trucks shall be wetted slightly, leveled, and covered to minimize soil falling onto roadways. Transportation routes, times of work, and dust controls shall be chosen to reduce impacts to residential and other sensitive areas during removal and transport over public right-of-way (ROW). Remediation shall be conducted in coordination with, and approval of, the California Department of Toxic Substances Control (DTSC) and the San Francisco Bay Regional Water Quality Control Board (RWQCB), should testing indicate soil contamination at levels requiring remedial action.

HAZ-6: Asbestos and Lead-Based Paint. For the Labor Contractors residence and any other structures that are demolished or disassembled, the Park District shall incorporate into contract specifications the requirement that the contractor(s) remove all potentially friable asbestos-containing building materials (ACBMs) in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition that may disturb the materials, by a contractor registered with Cal/OSHA as an asbestos abatement contractor. The contractor performing abatement shall hold the C-22 asbestos abatement license or a B-class general license with asbestos certification. Because asbestos-containing materials on the project site are likely to become friable during demolition, all such materials must be abated prior to demolition. All demolition and disassembly activities shall be undertaken in accordance with Cal/OSHA standards, contained in Title 8 of the California Code of Regulations (CCR), Section 1529, to protect workers from exposure to asbestos. All friable asbestos materials, and any non-friable materials that may become friable during abatement, shall be disposed of as hazardous (regulated) asbestos-containing material. Non-friable materials that are not made friable may be disposed of as non-hazardous asbestos-containing material. A 10-day notice of planned asbestos removal and disposal shall be given to the Bay Area Air Quality Management District (BAAQMD), along with a notification of demolition of structure(s). The local office of the State Occupational Safety and Health Administration (OSHA) shall be notified at least 24 hours prior to abatement activities.

For the Labor Contractors residence and any other structures that are demolished or disassembled, the Park District shall incorporate into contract specifications the requirement that the contractor(s) remove all potential lead-based paint. Personnel must have lead training sufficient to meet the requirements of Cal/OSHA, 8 CCR 1532.1. The workers shall use lead-safe work practices when handling paints with any detectable amount of lead. A containment area shall be used to prevent the buildup of lead dust on remaining surfaces, in compliance with California Department of Public Health requirements. All waste streams created as part of the project shall be profiled or characterized prior to disposal, and packaged as applicable, in compliance with the requirements of the California Department of Toxic Substances Control and Title 22.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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IX. HYDROLOGY AND WATER QUALITY: Would the project:

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comment to Questions

- a) The Project area includes four local waterways; Ardenwood Creek on the south, Patterson Sough, Crandall Creek on the north, and the regional Flood Control channel- Alameda Creek Flood, off site to the immediate north. Patterson Slough, Ardenwood Creek and Crandall Creek all drain downstream through Coyote Hills Regional Park to Alameda Creek, which discharges to South San Francisco Bay. Earthwork and grading activities for construction of the proposed Project Recreation and Visitor Serving facilities such as the 100 car and 20 car parking lots, the restroom and picnic area, would impact approximately 3 acres in the Ranch Road Recreation Unit and in the Farm Yard area. Approximately 4 miles of new trail construction would also disturb approximately 5 acres of land in all of the Natural and Recreation Units. An additional approximately 47 acres would be disturbed for construction of the ACFCWCD Wetlands Mitigation project in the Southern Wetlands Natural Unit. Approximately 202 acres of the remainder of

the 306 -acre Park expansion property would be disturbed associated with the habitat restoration and enhancement work. This includes clearing and grubbing, selective removal of invasive weed seed containing topsoil, grading of shallow seasonal wetlands, selective topsoil and compost placement, and drilling shallow, small diameter holes for native tree and shrub planting and restoration throughout the remaining project area. Because of favorable soil and shallow groundwater conditions, the restoration work would not require extensive grading or alteration of hydrologic conditions.

Grading and construction of the proposed project could cause short-term, potentially significant impacts to water quality if sediment-laden runoff, fuel or other construction chemicals are not adequately controlled, and are accidentally or unintentionally released into these waterways. This is a **potentially significant impact**.

Implementation of Mitigation Measures HYDRO-1, HYDRO-2, and HYDRO-3 would reduce these potential impacts to a **less-than-significant** level.

- b) The Project Area lies within the Niles Cone Groundwater Basin, a major water source for the Alameda County Water District. The Project area includes two (2) groundwater wells that mainly draw water from the upper or Newark aquifer that could be used for temporary irrigation for habitat restoration, along with continued farm field irrigation. There are also an estimated eight (8) abandoned wells within the Project area or immediately adjacent to it. Grading and construction activities that damage wells can impact groundwater by causing down well leakage of poorer quality near surface water to lower and better quality, deeper aquifers

The Park District will work with the Alameda County Water District (ACWD) to find and destroy abandoned wells on the site according to ACWD specifications. This would involve removing the well pump and any above ground infrastructure, pulling casing, and grouting or sealing closed the well bore hole.

The project site also may contain abandoned septic tanks and leach fields associated with historic farm buildings that have since been demolished. Any such tanks would be located and removed per Alameda County Onsite Wastewater Treatment System Code, Section 9, as part of proposed site demolition work. This would involve removing septic tank lids, pumping tank chambers, perforating tank bottoms, backfilling the tanks with pea gravel or drain rock, top-soiling, composting or backfilling any depressional areas created by the work and revegetating the disturbed soil surface. Leach lines normally do not need to be removed. This work would be done under a County Environmental Health Department-issued permit.

If the abandoned well destruction, drilling for construction of piers and construction piling, or the closure of septic tanks were not completed or were poorly completed, groundwater quality could be adversely impacted. This represents a **potentially significant impact**.

Irrigation for native tree and plant establishment and associated habitat management work would be conducted over a 3-year period. Total annual irrigation volumes are estimated to be less than 3.0- to 4.5 acre-feet of water.

Source of irrigation water for habitat restoration would be the existing agricultural irrigation well located in the farm field south of Patterson Ranch Road and/or recycled water, if available. This historic irrigation water source would also continue to be used to irrigate the approximately 20 to 50 acre farm fields in the Historic Patterson Ranch Farm Agricultural Unit. Agricultural irrigation is considered to be an on-going and approved water use (an existing condition) and is not a part of the Project for CEQA review purposes. For comparison purposes, typical agricultural crop water usage in this area ranges from about 2.0 to 2.5 acre feet of water annually, per acre. If the 50 acres of land in the Agricultural Unit were irrigated, total annual irrigation water use would be about 100 to 125 acre feet of water, drawn from the deep aquifer.

Historically over 150 acres of land were irrigated for crop production on Patterson Ranch, estimated to use over 300 to 375 acre feet of groundwater, annually. Considering the small amount of groundwater needed for restoration plant establishment as compared to historic agricultural uses it is unlikely that this will substantially deplete groundwater, result in a net deficit in aquifer volume, lower the local groundwater table, or interfere with nearby wells. This is a **less than significant impact**.

Implementation of Mitigation Measures HYDRO-4 and HYDRO-5 would reduce potential groundwater related impacts to a **less than significant** level.

- c-d) As part of the ongoing Phase 1 of the Line P/ Ardenwood Creek Flood Control and Wetlands Mitigation Project to be constructed in cooperation with Alameda County Flood Control and Water Conservation District, the Project would excavate and disturb approximately 47 acres in the Southern Wetlands Natural Unit. Excavation depth would be three (3) to four (4) feet to create an approximately 30-acre detention basin and associated wetlands. Flood water above the 2-year flood level would be diverted from Ardenwood Creek into the detention basins during flood events via gate controls. An existing agricultural drainage ditch at similar bottom depth elevations would be incorporated into the basins. The floodwater would be temporarily stored and then released back into Ardenwood Creek for downstream discharge once flows in Alameda Creek recede. The temporary detention basins would also provide wetland habitat, aquifer recharge, and de-silting and sediment deposition of diverted floodwaters.

Local alteration of the Ardenwood Creek channel to include physical connection to the 2 flood detention basins, and associated flood flow diversion and temporary storage is considered to have beneficial impacts on flooding and siltation, and is therefore a **less than significant** impact.

- e-f) The proposed project includes construction of the following impervious surface areas:

- Approximately 160,000 square feet of new and relocated paved multi-use trail ²⁶
- Approximately 88,000 square feet of reconstructed/elevated paved multi-use trail ²⁷
- Approximately 40,000 square foot, 100-car paved parking lot
- Approximately 10,000 square foot 20-car paved parking lot.

In addition to these impervious surfaces, the proposed project includes the following unpaved or semi-pervious surfaces:

- Approximately 17,000 square feet of unpaved trails (footpaths)
- Approximately 101,500 square feet of gravel multi-use trail
- Approximately 40,000 square feet unpaved open-use recreation/staging area

Existing site runoff does not currently drain into a urban storm-drain or storm-sewer system. All of the project access roads and trails would be out-sloped and designed to disperse runoff locally, and not concentrate flow. The proposed 100-car and 20-car parking lots would be designed to route runoff from impervious surfaces through bioswales and rain garden areas prior to release via dispersed flow to adjacent grassed and landscaped areas. However, unless properly designed and constructed, increased runoff from impervious and semi-pervious surfaces could overwhelm local stormwater conveyance systems and cause local flooding problems. This is a **potentially significant impact**.

Grading and construction activities that disturb soils and are not properly stabilized could cause increased turbidity in surrounding surface waters. Disturbed and exposed surfaces would be susceptible to the erosion forces of wind and water and could result in the degradation of water quality in Patterson Slough,

²⁶ A small portion of this is relocated Tuibun Trail in the vicinity of the proposed parking lot.

²⁷ Most of this is relocation of existing paved trail west of existing kiosk and represents a small net increase.

Ardenwood Creek, Crandall Creek, and downstream water bodies in the adjacent Coyote Hills Regional Park.

The proposed Project includes measures to minimize erosion and water quality degradation. However, if improperly designed, constructed, and maintained, implementation of the proposed Project would result in short-term and long-term increases in erosion and subsequent degradation of water quality. This is a ***potentially significant impact***.

Implementation of Mitigation Measure HYDRO-6 along with previous Mitigation Measure HYDRO 1 and HYDRO-2 would reduce potential runoff related impacts to a ***less than significant*** level. ***See Mitigation Measures HYDRO-1 and HYDRO-2 in Section a).***

- g) The Project proposes no housing construction; therefore there is *no impact*.
- h-i) The Proposed Project includes the installation of four (4) new bridge crossings over streams or drainage systems that have or are located near FEMA-designated floodplains and floodways. The proposed 80-foot Ardenwood Creek bridge would be part of the Tule Loop Trail and would provide vehicular and pedestrian access across Ardenwood Creek just west of the Southern Wetlands Natural Unit. The creek in this area and the downstream J Ponds area would be improved for flood conveyance by ACFCWCD as part of the Phase 2 Line P Flood Control and Restoration project. The proposed bridge would be designed to clear span the creek channel. A 20-foot long footbridge is proposed over a ditch located along the southern or outboard toe of the Crandall Creek Levee near the Patterson Ranch Slough Natural Unit. Alternatively this ditch could be culverted to provide the footpath section and connection to the existing Crandall Creek trail.

As a result of the recently completed Ardenwood Creek (Line P) Flood Control and Habitat Restoration Project, the 100-year flood flow is now contained within Ardenwood Creek within the project area, its designated channel bypass area, and flood detention structures. 100-year flood flows are also entirely contained within the leveed channel banks of the Alameda Creek Flood Control Channel.

The Crandall Creek south levee has not been certified by FEMA as being structurally stable or having the required three feet of freeboard above projected 100-year flood levels. According to FEMA floodplain mapping for this area, 100-year flood flows could potentially erode, or overtop the south channel bank levee of Crandall Creek (Line K) within the project area, causing possible shallow flooding. Flooding depths and flood flow velocities are expected to be minimal and would flood fallow local agricultural fields and open space habitat areas. The proposed footbridge constructed near the Crandall Creek Levee would be designed to be resilient to overtopping, minimize flood flow erosion, and to not cause scour or erosion to the adjacent levees. As floodwater would flow into open space, there is no threat or risk to buildings or structures from shallow flood flow diversion. Footbridges would be closed by park staff if flood events impact public safety and reopened after flood waters recede.

An approximately 100-foot long bridge would also be constructed along the northern edge of the DUST Marsh, reconnecting the eastern portion of the DUST Trail with the western end of the Crandall Creek Trail. This connection was previously a seasonal pathway that has become un-passable. The bridge would be located on Park District property.

A 550-foot pedestrian walkway cantilevering off of the existing Ardenwood Blvd. bridge over the Alameda Creek Flood Control Channel is also being evaluated as a part of this CEQA document.

Final bridge plans have not been prepared for any of the proposed bridge structures. All bridges would be designed so that the bottom cord of the bridges clear the 100-year flood elevation by a minimum of 1-foot, if required by applicable City of Fremont and Alameda County flood management regulations. All

structures would be designed so that none of the bridge or boardwalk structures affect local floodwater elevations, block or divert flood flows, or cause local scour or channel and levee instability problems. However if of the bridges, are improperly designed and constructed, they could cause or contribute to local flooding problems. These represent ***potentially significant impacts***.

Implementation of Mitigation Measure HYDRO-7 would reduce potential flooding related impacts to a ***less than significant*** level.

- j) The Project area is not in a tsunami inundation zone, an area susceptible to seiche or mudflows, therefore there is ***no impact***.

Mitigation Measures

HYDRO-1: Soil Erosion Control and Revegetation Plan. The Park District shall prepare a Soil Erosion Control and Revegetation Plan that addresses temporary construction-related temporary erosion control and provides permanent erosion control through revegetation and other means. The Plan, which can be a part of the project SWPPP see (HYDRO-2) shall be incorporated into the Project's Construction Documents. The Construction Plans shall specify erosion and sediment control measures, including Best Management Practices (BMPs) to control short-term construction-related water quality impacts. BMPs shall include at a minimum the following measures (where applicable):

- Limiting access routes and stabilizing access points. Surface disturbance of soil and vegetation shall be minimized; existing access and maintenance roads shall be used wherever feasible.
- Stabilizing graded areas as soon as possible following completion of disturbance with seeding, mulching, and installation of erosion control materials such erosion control blankets and straw rolls, or other approved and effective methods. Only native seed and plant materials shall be used, unless otherwise approved by the Qualified Biologist.
- Delineating clearing limits, easements, setbacks, environmentally sensitive areas, and drainage courses by marking them in the field, and installing exclusion fencing, silt fencing, and/or coir logs or straw rolls.
- Stabilizing and preventing sediment from entering temporary conveyance channels and stormdrain outlets.
- If rainfall is expected to occur, using temporary sediment control measures, such as additional silt fencing, straw rolls, covering stock piles and directing runoff to sediment detention structures to filter and remove sediment.
- Use temporary measures, such as flow diversion, temporary ditches, and silt fencing or straw wattles.
- Any stockpiled soil shall be placed, sloped, and covered so that it would not be subject to accelerated erosion.
- Accidental discharge of all Project related materials and fluids into local waterways shall be avoided by using straw rolls or silt fences, constructing berms or barriers around construction materials, or installing geofabric in disturbed areas with long, steep slopes.
- After ground-disturbing activities are complete for each Project component constructed, all graded or disturbed areas shall be covered with protective material such as mulch, and re-seeded with native plant species. The Erosion Control and Revegetation Plan SWPPP shall include details regarding site preparation, top soiling or composting, seeding, fertilizer, mulching, and temporary irrigation.

- HYDRO-2: Stormwater Pollution Prevention Plan.** A Stormwater Pollution Prevention Plan (SWPPP) and a Spill Control and Countermeasures Plan (SCCP) shall be prepared and implemented by the Park District's Construction Contractor following SWRCB standards for erosion control and stormwater management. Specific measures, as cited below, shall be adapted from the most current edition of the Stormwater Best Management Practice Handbook for Construction, published by the California Stormwater Quality Association (CASQA). The SWPPP shall include Best Management Practices (BMPs) to prevent or minimize stormwater pollution during construction activities, as well as addressing post construction stormwater management and permanent erosion control. The Project Erosion Control and Revegetation Plan, and Spill Control and Countermeasures Plan, shall be included as part of the SWPPP. Plan preparation and implementation shall be included in the Project's Construction Documents.
- HYDRO-3: Equipment Maintenance.** All refueling and/or maintenance of heavy equipment shall take place at a minimum of 50 feet away from the top of bank of creeks and all identified jurisdictional wetlands and Waters of the US drainage courses. The refueling/maintenance and construction staging area shall be bermed, graveled, or covered with straw and incorporate measures for capture of any accidental spills. All temporary construction lay-down and staging areas shall be restored upon completion of work with silt fences, straw rolls, and ground bags, etc. removed.
- HYDRO-4: Well.** The Park District shall coordinate and consult with the Alameda County Water District and obtain a permit or approval for the following:
- Closure of abandoned wells and related irrigation and drainage infrastructure.
 - Drilling for piers or wells that may penetrate groundwater aquifers.
 - Provide continued access to existing monitoring wells and continue to cooperate with ACWD in monitoring activities.
- HYDRO-5: Unused Septic Tank and Leachfield Systems.** The Park District shall obtain a permit or approval from Alameda County Environmental Health for the closure and abandonment of obsolete and unused septic tank and leachfield systems.
- HYDRO-6: Stormwater Management.** The Park District shall prepare and implement a post construction stormwater management plan in compliance with the City of Fremont's joint municipal stormwater permit and development permit program.
- HYDRO-7: Bridge Design.** The Park District shall prepare and submit final bridge plans for all new vehicular and pedestrian bridges that cross waterways under jurisdiction by the City of Fremont or Alameda County. The bridge plans are subject to review and approval by the City of Fremont Engineering Department and Alameda County Flood Control and Water Conservation District. The bridge plans shall include structural engineering, geotechnical engineering, and hydraulic engineering information. The responsible designer shall be a State of California licensed Civil Engineer and shall be experienced in hydraulic analysis, bridge design, and flood channel and bank protection design. The Engineering Plans shall demonstrate conformity to City of Fremont, Alameda County, and FEMA floodplain management regulations and include design elevations of the bridge/boardwalk, conformity with 100-year flood elevation freeboard requirements, the locations and structural design of the bridge abutments with respect to flood flows, bridge loading, and channel bank protection requirements.

	Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
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X. LAND USE AND PLANNING: Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comment to Questions

a) The 306-acre project site is currently undeveloped except for several uninhabited structures. Development of the proposed park expansion would not divide any established community. The proposed project includes pedestrian and bicycle intersection improvements on the west side of the intersection of Paseo Padre Parkway and Patterson Ranch Road, along with safety improvements to the intersection crossing by the San Francisco Bay Trail. These alterations to Paseo Padre Parkway would not impede or obstruct travel on this street. Therefore, the proposed project would therefore not divide an established community, and there would be **no impact**.

b) The project site is designated RCP (Open Space – Resource Conservation/Public) in the Fremont General Plan. Lands in the Resource Conservation and Public Open Space category “will remain as permanent open space through the horizon year of this plan. A limited number of recreational and regional park improvements, such as trails or interpretive nature centers, may be appropriate. However, the focus in most areas is on the preservation of natural open space and restoration and enhancement of native habitat.”²⁸

The project site is in an O-S (Open Space) zoning district, with the purpose “To permit limited but reasonable use of open lands while protecting the public health, safety and welfare from the dangers of seismic hazards and unstable soils; preserve the topography of the city that shapes it and gives it its identity; allow land to be used for agricultural production in its natural or as near natural state as possible; coordinate with and carry out regional, county, and city open space plans...”²⁹

The proposed park expansion project would maintain the site as open space, with limited visitor-serving improvements, which would be consistent with both the General Plan designation and zoning class of the site. This impact would be **less-than-significant**.

c) The project area is not covered by a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There would be **no impact**.

Mitigation Measures

N/A

²⁸ City of Fremont, *General Plan*, Adopted December 2011, Land Use Element, page 2-29.

²⁹ Southern Alameda County GIS Authority, available online at: <http://egis.fremont.gov/apps/public/>, accessed 1 May 2018.

	Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
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XI. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Comment to Questions

- a, b) Regionally significant construction aggregate resources in the City, as designated by the State Mining and Geology Board, include “Sector L”, which encompasses the northeast portion of the project site and “Sector M”, which extends into a small area of the southern portion of the project site. These sectors are constrained by one or more environmental issues. Although the City has not categorically excluded mineral resource development, it is not expected that extraction of these resources will continue due to the many environmental constraints. In any case, the proposed park expansion project would install limited visitor-serving facilities, such as trails and wildlife observation platforms within the designated mineral areas, while maintaining these areas as open space. This would not substantially affect the availability of the designated mineral resources. The impact on mineral resources would be less than significant.

Mitigation Measures

N/A

	Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
XII. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comment to Questions

Sound is created when vibrating objects produce pressure variations that move rapidly outward into the surrounding air. The more powerful the pressure variations, the louder the sound perceived by a listener. The decibel (dB) is the standard measure of loudness relative to the human threshold of perception. Noise is the term generally given to the “unwanted” aspects of intrusive sound. Many factors influence how a sound is perceived and whether it is considered disturbing to a listener, including the physical characteristics of sound (e.g., loudness, pitch, duration, etc.) and other factors relating to the situation of the listener (e.g., the acuity of a listener’s hearing, the activity of the listener during exposure: sleeping, working, etc.). Environmental noise has a number of documented undesirable effects on human health and welfare both psychological (e.g., annoyance and speech interference) and physiological (e.g., hearing impairment and sleep disturbance).

Environmental Setting: The *City of Fremont General Plan Safety Element* (Chapter 10 - Noise and Vibration section) identifies motor vehicles, trains, industrial uses and mechanical equipment as the City’s most significant noise sources. Other areas of the City are substantially affected by noise from such large transportation and stationary sources, but the Project site (i.e., several land parcels from the former Patterson Ranch, totaling about 300 acres) is currently open space and adjacent to the eastern border of the Coyote Hills Regional Park. State Highway 84 passes about a mile south of the Project site. The Paseo Padre Parkway (identified in the *General Plant Mobility Element* as an important north-south arterial roadway) defines the western limit of urban development in the City of Fremont. Lands to its west are devoted to recreational use and have no substantial local noise sources, although they are exposed to noise from frequent aircraft over-flights. Traffic noise contours presented in the *Safety Element* (Diagram 10-9) show that daily average noise levels on the Project site (except for the portions within a few

hundred feet of Paseo Padre Parkway) are presently at or below 55 dB and are expected to remain so through the year 2030³⁰.

The Project site was visited on Wednesday, September 19, 2018 and several short-term noise measurements were taken at various locations on and near the site. These measurement data are shown in **Table NOI-1** along with observations of the sources contributing to the measured noise levels. The closest existing noise-sensitive receptors to the Project site were identified as the residential areas just east of Paseo Padre Parkway and Ardenwood Boulevard.

Table NOI-1: On-/Near-Site Daytime Noise Measurement Data and Survey Observations

Measurement Location	L _{min}	L ₉₀	L _{eq}	L ₁₀	L _{max}	Observations
Location #1 Coyote Hills Visitors Center, north edge of picnic/play area. Begin 12:02	42.5	47.4	59.6	61.5	76.8	Area of Park most exposed to human activity noise; large group of elementary school children at lunch/play before leaving for hike.
Location #2 Quarry Staging Area, near south end of parking lot. Begin 12:43	40.3	41.0	47.3	50.7	56.9	Low activity, only a few cars in parking lot, no picnickers or play near; aircraft fly-overs have dominant noise influence; commercial/small private planes every few minutes, fly-over at high altitude.
Location #3 Project site (Patterson Slough parcel), 350 feet west of Paseo Padre Parkway. Begin 13:29	39.8	41.2	44.6	46.1	54.0	Light traffic on Paseo Padre, cars faintly audible as they pass individually and in groups; occasional aircraft fly-overs, but less frequently than in areas of the Park closer to San Francisco Bay.
Location #4 Ardenwood Blvd, 200 feet north of Commerce Dr., near closest residential. Begin 14:03	45.7	51.0	68.3	72.8	79.8	Traffic on Ardenwood Blvd. is dominant noise source; noise peaks in high 60s to mid-70s from cars as they pass; homes along Ardenwood are shielded by an 8-10-foot sound wall.
<p><i>The unit of measurement for table entries is the decibel (dB), the standard measure of a sound's loudness relative to the human threshold of perception. Decibels are said to be A-weighted (dBA) when corrections are made to a sound's frequency components during a measurement to reflect the known, varying sensitivity of the human ear to different frequencies. The Equivalent Sound Level (L_{eq}) is a constant sound level that carries the same sound energy as the actual time-varying sound over the measurement period. Statistical Sound Levels - L_{min}, L₉₀, L₁₀ and L_{max} - are the minimum sound level, the sound level exceeded 90 percent of the time, the sound level exceeded 10 percent of the time and the maximum sound level, respectively. All entries as recorded during the measurement periods, which for all cases above were 10-15 minutes.</i></p>						

³⁰ City of Fremont, *City of Fremont General Plan, Safety* (Chapter 10), December 2011

Regulatory Setting

The following policies and implementations taken from the *Safety Element* are relevant to assessing the noise impacts of the proposed Project.

Policy 10-8.1 (Site Development Acceptable Noise Environment) with Implementation 10-8.1.A (Noise Standards)

- New development projects shall meet acceptable exterior noise level standards ... the “normally acceptable” noise standards are established in *Land Use Compatibility for Community Exterior Noise Environments* (Table 10-4 of the *Safety Element*). For “Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds” [the *Safety Element* land use category that seems most applicable to the Project land use], the highest normally acceptable level is an L_{dn} ³¹ of 65 dB.
- The goal for maximum [normally] acceptable noise levels in residential areas is an L_{dn} of 60 dB ... [it] will be applied where outdoor use is a major consideration (e.g., backyards in single family developments and recreation areas in multifamily projects).

Policy 10-8.3 (Noise Environment Protection)

Protect existing residential neighborhoods from noise. In general, the City will require the evaluation of mitigation measures for projects under the following circumstances:

- The project would cause the L_{dn} to increase by 5 dB or more but would remain below 60 dB, or;
- The project would cause the L_{dn} to increase by 3 dB or more and exceed 60 dB, or;
- The project has the potential to generate significant adverse community response due to the unusual character of the noise.

Policy 10-8.5 (Construction Noise Levels) with **Implementation 10-8.5.B** (Construction Noise Mitigation)

- Continue to apply the construction hours ordinance to new development to limit noise exposure created by construction activity. Apply best practices to further limit noise in sensitive areas and long-term projects, such as maintaining construction equipment in good condition and use of mufflers on internal combustion engines, installation of temporary noise barriers, prohibiting extended idling time of internal combustion engines, locating staging areas away from sensitive receptors and other feasible best management practices.

Policy 10-8.10 (Vibration Environment) with **Implementation 10-8.10.A** (New Development to meet FTA [Federal Transit Agency] Guidelines)

- The FTA has developed criteria for judging the significance of vibration produced by transportation sources and construction activity, which the City of Fremont has adopted. Under FTA criteria, limiting vibration levels to 94 VdB³² or less would avoid structural damage to wood and masonry buildings (which are typical of residential uses and most other vibration-sensitive receptors), while limiting vibration levels to 80 VdB or less would avoid significant annoyance to the occupants.^{33, 34}

³¹ L_{dn} is a 24-hour average noise level where noise occurring after 10 pm and before 6 am has a 10 dB “penalty” added to it before the average is taken. Thus, L_{dn} is always higher than the straight 24-hour L_{eq} .

³² Vibrating objects in contact with the ground radiate energy through the ground, which is measured in vibration decibels (VdB). If such an object is massive enough and/or close enough to an observer, the ground vibrations can be perceptible and, if the vibrations are strong enough, cause damage to existing buildings. Background ground vibration levels in most inhabited areas are usually 50 VdB or lower, well below the threshold of perception (i.e., typically about 65 VdB).

³³ The FTA vibration annoyance threshold is sensitive the number of daily vibration events affecting a receptor. If such events are 30 or fewer, the 80 VdB limit applies, but the limit drops to 72 VdB if the number of events is 70 or more.

³⁴ Federal Transit Agency (FTA), Transit Noise and Vibration Impact Assessment, May 2006.

- The FTA also has criteria for what constitute substantial adverse traffic noise increments, which are more stringent at higher levels of noise exposure (i.e., above 60 dB L_{dn}) than the incremental standards adopted by the City of Fremont, as shown in **Table NOI-2**.

Table NOI-2: FTA Incremental Transportation Source Noise Impact Criteria

Residential and other buildings where people normally sleep ¹		Institutional land uses with primarily daytime and evening uses ²	
Existing L_{dn}	Allowable Noise Increment	Existing Peak Hour L_{eq}	Allowable Noise Increment
50	5	50	9
55	3	55	6
60	2	60	5
65	1	65	3
70	1	70	3

Notes:

¹ This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.

² This category includes schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material.

Source: Federal Transit Administration, *Transit Noise Impact and Vibration Assessment*, May 2006.

The City of Fremont’s Standard Development Requirements that apply to all development projects include the following requirements for noise, as stipulated in Fremont Municipal Code Section 18.218.010:

(d) *Noise.*

(1) *Construction Noise. To reduce the potential for noise impacts during construction, the following requirements shall be implemented:*

(A) *Construction equipment shall be well-maintained and used judiciously to be as quiet as practical.*

(B) *Construction, excavating, grading, and filling activities (including the loading and unloading of materials, truck movements, and warming of equipment motors) shall be limited as provided in Section 18.160.010.*

(C) *All internal combustion engine-driven equipment shall be equipped with mufflers, which are in good condition and appropriate for the equipment.*

(D) *The contractor shall utilize “quiet” models of air compressors and other stationary noise sources where technology exists.*

(E) *Loading, staging areas, stationary noise generating equipment, etc., shall be located as far as feasible from sensitive receptors.*

(F) *The contractor shall comply with Air Resource Board idling prohibitions of unnecessary idling of internal combustion engines.*

(G) Signs shall be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number for the project sponsor in the event of noise complaints. The applicant shall designate an on-site complaint and enforcement manager to track and respond to noise complaints. (Ord. 27-2016 § 37, 12-6-16; Ord. 23-2018 § 41, 10-2-18.)

The proposed project would be required to comply with the following limitations on construction hours, as stipulated in Fremont Municipal Code Section 18.16.010:

- (a) Except as modified herein, construction activity for development projects in any zoning district on any property within 500 feet of one or more residences, lodging facilities, nursing homes or inpatient hospitals shall be limited to the weekday hours of 7:00 a.m. to 7:00 p.m. and the Saturday or holiday hours of 9:00 a.m. to 6:00 p.m., while Sunday construction is not allowed. Construction activity for projects not located within 500 feet of residences, lodging facilities, nursing homes or inpatient hospitals shall be limited to the weekday hours of 6:00 a.m. to 10:00 p.m. and the weekend or holiday hours of 8:00 a.m. to 8:00 p.m. A holiday shall be as defined in Section 2.35.010.*
- (b) Resident homeowners and their uncompensated volunteer workers performing construction activity on their own single-family detached home shall be limited to the weekday hours of 7:00 a.m. to 8:00 p.m. and the weekend hours of 8:00 a.m. to 8:00 p.m.*
- (c) This section shall not apply to construction necessary to prevent or repair an emergency condition, as reasonably determined by the city manager's designee.*
- (d) Projects requiring a permit under the authority of this code shall have construction hours noted on the cover sheet of the construction plans.*
- (e) Projects requiring a permit under the authority of this code, except additions and alterations to single-family residential homes or lots, shall have an all-weather notice board conspicuously placed adjacent to the most visible public right-of-way for the duration of construction activity. The placement, format and content of the notice board shall be prescribed by city staff, and shall contain, at a minimum, summary project information, allowable construction hours, and city staff contact information.*
- (f) The city manager's designee shall have the authority to modify these hours under any of the following conditions:*
 - (1) To facilitate staff supervision or inspection or when the applicant is required to comply with more restrictive provisions of this code, state or federal law.*
 - (2) When, based upon the nature of nearby uses and/or site-specific considerations, he or she makes a finding that such modified construction hours are reasonably foreseeable to result in an equal or superior level of comfortable enjoyment of life and property by the community.*
 - (3) When the project is located in a right-of-way or easement or on publicly owned property, and such modified hours, on balance, will minimize disruption to the community as a whole, such as to facilitate the orderly flow of traffic or to reduce negative impacts on commercial or residential activity.*
- (g) Violations of the provisions of this section shall be considered a public nuisance as defined in Section 8.60.040 for purposes of enforcement and remedy. In addition to the provisions of Title 8, staff shall have the power to withhold inspections if construction hours are not observed. (Ord. 36-2005 § 1, 11-22-05. 1990 Code § 8-2205.)*

- a) According to the noise contour map presented in the *Safety Element* (Diagram 10-9), the daily average noise background levels on most of the Project site (except for portions of the site within a few hundred feet of Paseo Padre Parkway) are at or below 55 dB, substantially below the City's 65 dB "normally acceptable" level for "outdoor sports and recreation, neighborhood parks and playgrounds." Further, the noise measurements taken during the Project site survey support the conclusion that existing daily average noise background levels over most of the Project site and over most of the existing Coyote Hills Park (except for areas near the Park's Visitors Center and the recreational facilities surrounding it) are substantially lower than 55 dB.³⁵

The Project would not introduce new stationary noise sources to the site, nor would the Project contribute to substantial additional motor vehicle noise along site access roads (more on the estimated permanent Project traffic noise increments in the **Item c** discussion below). After the Project improvement/restoration work is complete, noise levels in the enlarged Coyote Hills Park (except for portions within a few hundred feet of Paseo Padre Parkway) and in the closest residential areas will remain well within City General Plan standards for park and residential uses, respectively, a **less-than-significant impact**.

- b) The most vibration-intensive piece of construction equipment is a pile driver, but no pile driving will be required for the Project. For the proposed Project improvement/restoration work, the construction equipment will include excavators, loaders, dozers, graders, dump/concrete trucks, etc. in various numbers and combinations during the three-year Project construction period. These types of construction equipment are far less vibration-intensive than pile drivers. They would have to operate directly adjacent to vibration-sensitive buildings for extended periods for there to be a substantial potential for structural damage, or within a few hundred feet for there to be a substantial potential for annoyance to occupants of such buildings. The residences closest to the Project site are 800 feet or more east of the closest parcels where improvement/restoration work would occur. The only fixed vibration-sensitive receptor in the Coyote Hills Park is its Visitors Center, which is located almost a mile west of the closest parcels where improvement/restoration work would occur. Thus, Project construction vibration impacts would be **less than significant**.
- c) Once the proposed Project's access improvements and habitat restoration are complete, it is expected that additional visitors would be attracted to the enlarged Coyote Hills Park. The Project traffic impact report estimates a 25% increase in daily motor vehicle trips (i.e., 70 additional daily trips, from a current daily total of 310 trips to 380 trips post-expansion). Since Paseo Padre Parkway, the site's current major vehicular access road, currently carries more than 11,000 vehicles per day, the Project permanent traffic noise increment at adjacent receptors would amount to a small fraction of a dB,³⁶ an increase far less than the City of Fremont's or the FTA's incremental standards. Thus, Project permanent incremental operational noise impacts would be **less than significant**.
- d) Construction equipment/activity is widely recognized as a major noise source with the potential to cause substantial disturbance when a construction site is located near noise-sensitive receptors (e.g., residential areas, schools, hospitals/nursing homes, public parks, etc.). Implementation of the Project access improvements/habitat restoration to the former Patterson Ranch parcels will require a substantial fleet of construction equipment and supply/concrete delivery trucks operating over an extended period (i.e., Summer 2019 through Summer 2021). All the proposed improvements/habitat area restorations will be

³⁵ Federal Transit Administration (FTA) guidelines (*Transit Noise and Vibration Impact Assessment*, 2006, Appendix D – Determining Existing Noise) for the estimation of 24-hour average noise levels (i.e., L_{dn}) from shorter-term measurements indicate that L_{dn} would be about 2 dB less than the L_{eq} measured during a daytime hour. Daytime hourly noise levels measured on the Project site and Coyote Hills park were in the mid- to upper 40s dB.

³⁶ According to FTA traffic noise methodology, the doubling of a roadway's traffic volume would increase noise levels by 3 dB at adjacent receptors. Since Paseo Padre Parkway carries about 11,000 vehicles per day, an increase of 70 vehicles by the Project would increase adjacent noise levels by about 0.03 dB.

worked on sequentially, not simultaneously, thus limiting the areas of and times that Coyote Hills Park and the closest existing residential area would be exposed to elevated noise levels during Project construction. In addition, all pieces of equipment operating in any particular improvement/restoration area would not have comparable noise impacts at any one receptor - the noise impact of the closest piece of equipment to a receptor is dominant and only a limited number of additional equipment pieces can operate effectively in close proximity to the closest piece.

The Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) was used to estimate the noise levels produced by a smaller working-group of construction equipment likely to be used for Project construction (i.e., a dump truck, an excavator and a grader) at various distances from the locus of work, as shown in **Table NOI-3**³⁷.

Table NOI-3: Modeled Construction Noise Levels

Distance from Area of Construction Activity (feet)	Average Construction Daytime Noise Level L _{eq} (dBA)	Maximum Construction Daytime Noise Level L _{max} (dBA)
50	82	85
100	76	79
200	70	73
400	64	67
800	58	61
1600	52	55

Source: Federal Highway Administration, Roadway Construction Noise Model (RCNM).

During construction of Project access improvements and habitat restoration, noise levels in areas of the existing Coyote Hills Park close to a locus of construction activity (i.e., within about 200 feet) would rise to levels incompatible with leisure activities. However, since the total area of Coyote Hills Park extends over thousands of feet west and south of the parcels that Project construction would be active on, noise levels in large areas of the Park would remain acceptable for leisure and recreational activities during construction. Considering that the purpose of the Project is improving/expanding Park facilities for public use, temporary voluntary shifts by Park users to areas of the Park less-affected by construction noise could be accommodated without substantial inconvenience until Project construction is complete.

The nearest off-site sensitive receptors to the Project site are the residential areas east of Paseo Padre Parkway and Ardenwood Boulevard, about 800 feet or more west of the closest Project parcel. At this distance, worst-case project average/maximum construction noise levels would be substantially below the existing traffic background noise levels (see noise levels measured at Location #4 in Table NOI-1) that the residences facing these two roadways already experience.

Nevertheless, City General Plan **Policy 10-8.5** would require imposition of measures to reduce project construction noise impacts to the maximum feasible extent, as specified below. Compliance with the City of Fremont’s Standard Development Requirement for noise (Fremont Municipal Code Section 18.218.010) and limitations on construction hours (Section 18.160.010), and inclusion of Mitigation Measure NOI-1 will assure that the proposed Project’s temporary incremental noise impacts are **less than significant**.

- e) Although the Project site is not within any local airport’s land use plan or within 2 miles of an existing airport, it is located within 20 miles of all three of the Bay Area’s major commercial airports: San Francisco International Airport, Oakland International Airport, and San Jose International Airport. And because of its

³⁷ Federal Highway Administration (FHWA), Roadway Construction Noise Model User’s Guide, January 2006.

location close to the San Francisco Bay shore, it is subject to frequent over-flights of aircraft on approach/departure routes that frequently follow the San Francisco Bay shore. But the great majority of such over-flights are at relatively high altitude and the Project site is far outside the 65 dB daily average noise contours (i.e., the common federal metric of noise impact to noise-sensitive receptors) as recently determined around each major Bay Area airport. Thus, aircraft noise impacts on/near the Project site are **less than significant**.

f) The proposed project is not located in the vicinity of a private airstrip. **No impact.**

Mitigation Measures

NOI-1: The following BMPs shall be incorporated into the construction documents to be implemented by the project contractor:

- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- Use quietest type of construction equipment whenever possible, particularly air compressors.
- Locate stationary equipment, material stockpiles, and vehicle staging areas as far as practicable from sensitive receptors.
- Prohibit unnecessary idling of internal combustion engines.
- Designate a noise (and vibration) disturbance coordinator at the Park District who shall be responsible for responding to complaints about noise (and vibration) during construction. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler) and determine and implement reasonable measures warranted to correct the problem.
- Limit noise generating activities to the weekday hours of seven a.m. to seven p.m. and the Saturday or holiday hours of nine a.m. to six p.m., with Sunday noise not allowed per City noise ordinance.

	Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
XIII. 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comment to Questions

a) The proposed project would not construct new homes or businesses, with the exception of possible re-use of the historic Milk House building as a produce stand or other agriculturally related use. The project's new infrastructure and utilities would be limited to that needed to serve the expanded park's

visitor facilities. These components of the proposed project would not result in substantial population growth in the area, either directly or indirectly. The impact on population growth would be ***less-than-significant***.

- b, c) There are no existing residents or habitable dwelling units on the project site. The Labor Contractors residence on the site, which would be demolished, is not in habitable condition and is currently unoccupied. The project would not displace any existing habitable housing or persons residing in the area, and there would be ***no impact***.

Mitigation Measures

N/A

Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
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XIV. PUBLIC SERVICES:

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

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comment to Questions

a) **Fire Protection.** The Fremont Fire Department (FFD) is responsible for providing the rapid delivery of emergency fire suppression, emergency medical services, technical rescue, hazardous materials response, and fire prevention to the City of Fremont. Service is delivered throughout Fremont from 11 fire stations. Fire Station 10 (5001 Deep Creek Road) is the closest fire station to the project site, located approximately 1.3 mile northeast of the project site. Fire Station 10 is staffed with one Fire Company (three firefighters) and is equipped with a fire engine, a patrol car and a utility vehicle for response to various call types. Fremont Fire Department is the primary provider of fire protection services to Coyote Hills Regional Park and the project area. On occasion, private paramedic companies serving Alameda County arrive first for emergency calls in the Park.

The East Bay Regional Park District Fire Department (EBRPD-FD) is a branch of the Public Safety Division within the East Bay Regional Park District that is comprised of fire and lifeguard services. The fire department provides all typical emergency services including fire suppression, search and rescue, fuels management, and pre-hospital emergency medical care. EBRPD-FD responds to incidents concurrently with other responsible fire agencies. Depending upon the park's location, fire response is shared either with CAL FIRE or with municipal fire departments. EBRPD-FD's response area includes both parklands and areas adjacent to parklands. In remote areas, primary fire suppression responsibility lies with the Alameda County Fire Department or CAL FIRE. The EBRPD-FD provides secondary wildland fire response in support of CAL FIRE.

The Park District maintains a webpage dedicated to fire safety. Fire warning information on the page is updated to reflect changing conditions, weather related safety warnings, and fire related park and trail restrictions (<http://www.ebparks.org/fire-warning#fire-safety>).

The proposed project would add the project site to Coyote Hills Regional Park, increasing the area of responsibility of the EBRPD Fire Department but not changing the area of responsibility of the Fremont

Fire Department. The project would increase the number of visitors, but would not change the recreational types of activities that occur in the project vicinity. This increase in usage would not result in a substantial increase in demand for service by the EBRPD fire department, which already serves the adjacent Coyote Hills Regional Park. Implementation of the proposed project would not create a need for expanded or new fire facilities in Fremont or the Park District. As discussed in Section VIII.h, above, the Park District's existing program of fire prevention and suppression would be implemented at the proposed project site. The impact on fire protection services would be *less-than-significant*.

Police Protection. The Fremont Police Department (FPD) provides police services in the city of Fremont. FPD is located at 2000 Stevenson Boulevard in central Fremont, approximately five miles east of the project site. All of the Department's business is conducted, and police services are dispatched, from this location. The FPD does not have any sub-stations, and no new stations are planned at this time. FPD provides patrol coverage of Fremont in three patrol zones (Zone 1, Zone 2, and Zone 3). The proposed project is located at the northwest corner of Zone 2, which covers portions of central and northern Fremont. According to interviews conducted with the Department for the Patterson Ranch Planned District EIR (2010), Zone 2 is patrolled three to four officers at any given time.

East Bay Regional Park District Police Services (EBRPD-PD) maintains a staff of full time professional police officers who are based out of Lake Chabot Regional Park in Castro Valley along with substations operated in Orinda and Antioch. At peak season during the summer, EBRPD Public Safety Division is staffed by approximately 500 personnel, including 65 sworn police officers. The department includes an Air Support Unit, Marine Patrol Unit, Equestrian Patrols, K-9 Unit, Special Enforcement Unit, Investigations Unit, and a 24-hour per day 911 Communications Center.

U.S. Fish and Wildlife agents are stationed at Don Edwards National Wildlife Refuge adjacent to and south of Coyote Hills Regional Park. Fish and Wildlife Agents perform routine patrols of the area and are occasionally in the Park, which results in the benefit of an increased law enforcement presence.

An additional measure of patrol and outreach in the park system is provided by the Park District's Volunteer Trail Safety Patrol. The Volunteer Trail Safety Patrol is comprised of five patrol groups: the Volunteer Mounted Patrol, the Volunteer Bicycle Patrol, the Volunteer Hiking Patrol, the Companion Dog Patrol, and the Volunteer Marine Safety Unit. Volunteer Trail Safety Patrol members are dedicated to preserving the safety of the public and of the East Bay Regional Park District's natural and historical resources. Patrol members observe and report safety issues, incidents, and emergencies; they educate visitors about East Bay Regional Park District resources, programs, facilities, and rules; and perform outreach to foster positive relationships among varied trail user groups.

The Fremont Police Department currently patrols the project site, as well as providing immediate response to emergencies within the existing Coyote Hills Regional Park. The proposed project would add the project site to Coyote Hills Regional Park, which is under the concurrent jurisdiction of the EBRPD and the Fremont Police Departments. This would increase the area of responsibility of the EBRPD Police Department but not change the area of responsibility of the Fremont Police Department. The project would increase the number of visitors, but would not change the recreational types of activities in the area. This increase in usage would not result in a substantial increase in demand for service by the EBRPD Police Department, which already serves the adjacent Coyote Hills Regional Park. Implementation of the proposed project would not create a need for expanded or new police facilities in Fremont or the Park District. The impact on police protection services would be *less-than-significant*.

Schools. The park expansion project would not construct any housing or generate additional population. There would be no effect on the student population or schools. There would be *no impact* on schools.

Parks. The project consists of an expansion of the existing Coyote Hills Regional Park. It would not increase local or regional population, or require new or physically altered park facilities to maintain acceptable service ratios. There would be *no impact* on parks.

Other Public Facilities. The proposed project would not require other new or physically altered public facilities, such as libraries, to maintain acceptable service ratios. There would be *no impact* on other public facilities.

Mitigation Measures

N/A

	Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
XV. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comment to Questions

- a) As discussed in Section XIV, above, the proposed project consists of an expansion of the existing Coyote Hills Regional Park. Because it would provide additional park facilities without increasing local or regional population, it is not anticipated to increase use of existing neighborhood or regional parks such that substantial physical deterioration of the facility would occur or be accelerated. This impact would be **less-than-significant**.
- b) The project consists of an expansion of the existing Coyote Hills Regional Park, the environmental impacts of which are evaluated in this Initial Study. As discussed in Sections I through XIX, implementation of mitigation measures identified in this Initial Study would reduce some project impacts to a less-than-significant level, but impacts on Cultural Resources and Transportation would be **potentially significant**. These impacts will be evaluated in the EIR.

Mitigation Measures

N/A

	Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
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XVI. 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comment to Questions

- a) through g) The proposed project would have a **potentially significant** impact on the local circulation system, transportation safety and hazards, emergency access and plans and policies regarding alternative transportation. These impacts, and required mitigation measures, will be evaluated in the EIR.

Mitigation Measures

Mitigation measures, if necessary, will be identified in the EIR.

Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
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XVII. TRIBAL CULTURAL RESOURCES: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. 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. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Comment to Questions

- a) The project site contains a prehistoric archaeological site (CA-ALA-13, or P-01-000034) that could be affected by the project. This is a **potentially significant** impact on tribal cultural resources, and will be evaluated in the EIR.
- b) The proposed project would involve ground disturbance including grading and trenching on a site with known archaeological resources, including potential human remains. This is a **potentially significant** impact on tribal cultural resources, and will be evaluated in the EIR.

Mitigation Measures

Mitigation measures, if necessary, will be identified in the EIR.

	Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
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XVIII. UTILITIES AND SERVICE SYSTEMS: Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comment to Questions

- a) Wastewater collection and treatment services to the project site are provided by the Union Sanitary District (USD), an independent wastewater district with a 60.2 square mile service area that includes the cities of Fremont, Newark, and Union City, and serves a population of 350,538 persons.³⁸ USD currently treats approximately 25 million gallons per day (mgd) of wastewater, and has the capacity to treat 33 million gallons per day, at the Alvarado Treatment Plant in Union City, approximately 2.5 miles northwest of the project area. The proposed project would generate a small incremental increase of wastewater at the new restroom on the project site. This wastewater would consist of normal domestic wastewater, which would not exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board. There would be **no impact**.
- b) Fremont is served by the Alameda County Water District (ACWD). According to adopted Urban Water Management Plan (UWMP) for the 2015-2020 period, water use in recent years the ACWD's service area has been declining due to District-sponsored demand management efforts and voluntary conservation efforts by customers.³⁹ Total water use in the Water District was 53,800 acre-feet in fiscal year 2014-2015.

³⁸ Union Sanitary District website, available online at: <https://www.unionsanitary.com/about-us/about-us/mission-facts-history>, accessed 1 May 2018.

³⁹ Alameda County Water District, Urban Water Management Plan 2015-2020, available online at: <http://www.acwd.org/index.aspx?nid=365>, accessed 1 May 2018.

The proposed project would install water lines to provide potable water to the new restroom and the existing Milk House building; reconstruct the existing sewer main along Patterson Ranch Road that serves the existing Visitor Center in Coyote Hills Regional Park west of the expansion project site; and install a parallel sewer line to service the new restroom on the project site. Both the potable water demand and the wastewater generation of the project's new visitor facilities would be small relative to existing water and wastewater treatment demand, respectively, and would not require the construction of new water or wastewater treatment facilities or expansion of existing facilities during normal, dry, or multiple dry years. This impact would be *less-than-significant*.

- c) The project would maintain existing undeveloped, permeable surfaces on most of the 306-acre project site. The project would create new impervious surfaces including a 100-car paved parking lot, restroom, entry kiosk, and 3.5 miles of ten- to 12-foot-wide paved trails. Construction of these facilities would create approximately five acres of new impervious surfaces, which would be distributed throughout the project area, and surrounded by pervious surfaces including wetlands. This would not result in a substantial alteration of stormwater flows, or interference with groundwater recharge, on the project site. No new or expanded stormwater drainage facilities would be required. This impact would be *less-than-significant*.
- d) As discussed in Section XVII.b, above, the potable water demand of the project's new visitor facilities would be small relative to existing water demand, and could be served by existing entitlements and resources. No new or expanded entitlements would be needed. This impact would be *less-than-significant*.
- e) As discussed in Sections XVII.ba and XVII.b, above, the wastewater generation of the project's new visitor facilities would be small relative to existing wastewater treatment capacity, and could be served by available capacity at the existing Alvarado Treatment Plant. This impact would be *less-than-significant*.
- f, g) Allied Waste Services, Fremont's franchise service hauler, provides recycling and organic collection services to residents and businesses in Fremont. Fremont's solid waste disposal requirements include recycling or special materials disposal programs to comply with the provisions of AB 939 (which mandate a minimum 50 percent diversion of material from landfills by 2000) and the Alameda County Waste Reduction and Recycling Act of 1990 (Measure D, which adopted a policy goal to further reduce the total tonnage of materials at landfills generated in Alameda County by 75 percent by 2010).

Construction of the proposed project would generate construction and demolition waste, which could affect Fremont's ability to meet the requirements of AB 939 and Alameda County related to the reduction of solid waste disposal, a *potentially significant* impact on landfill capacity. Implementation of the following Mitigation Measure UTIL-1 would reduce this impact to a *less-than-significant* level.

Operation of the proposed recreational project would result in a small increase in the amount of solid waste generated at the site. It would not generate unique types of solid waste that would conflict with existing regulations applicable to solid waste disposal, or create the need for any special solid waste disposal handling. The non-recyclable waste generated by operation of the project would be small and would not have a substantial effect on permitted capacity on the landfills serving the project site. The project would comply with all statutes and regulations related to solid waste. The impact of project operation would be *less-than-significant*.

Mitigation Measures

- UTIL-1: Construction and Demolition Debris.** Prior to completion of the plans and specifications, the Park District shall review the plans to ensure that they include a solid waste recovery plan. This recovery plan shall be in compliance with the Park District's adopted sustainability policy, which is directed at

minimizing disposal of solid waste generated during construction in accordance with applicable state and county codes. The recovery plan shall address, at a minimum, recycling of asphalt and concrete paving materials, lumber and metal and concrete pipes and tanks, and balancing graded soil on site to the maximum extent feasible.

	Potentially Significant Impact	Less-than-significant with Mitigation	Less-than-significant Impact	No Impact
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XIX. 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, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Comment to Questions

- a) The proposed project could contribute to potentially significant cumulative impacts on biological resources. These impacts will be evaluated in the EIR.
- b) The proposed project would contribute incrementally to cumulative air pollutant emissions, traffic, and noise. Project-related air quality emissions would be below the BAAQMD significance thresholds for construction emissions, with implementation of Mitigation Measure AIR-1, and the project would not make cumulatively considerable contributions to the Bay Area’s regional problems with ozone or particulate matter. Thus, by complying with the regional air quality plan, cumulative air quality emission impacts of the project would be less-than-significant.

As a recreational park use within an urbanized area, operation of the project would have a less-than-significant impact on increases in ambient noise levels in the project vicinity. Implementation of Mitigation Measure NOI-1 would reduce temporary construction noise impacts to a less-than-significant level. The project is not expected to cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street and highway system. Therefore, project-related vehicle trips would not cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. The project would not result in cumulatively considerable noise impacts and, therefore, no significant cumulative noise impacts are expected.

The proposed project could contribute to **potentially significant** cumulative impacts on biological resources, cultural resources, and transportation. These cumulative impacts will be evaluated in the EIR.

- c) As discussed in Section VIII. Hazards and Hazardous Materials, the project would follow all laws and regulations involving the use and transport of hazardous materials and would not cause potential health risks to the public. Mitigation measures have been included to reduce the impacts of Hazards and Hazardous Materials to a **less-than-significant** level.

4.0 REFERENCES

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Appendix B

Notice of Preparation (NOP) and Comments on NOP



2950 PERALTA OAKS COURT P.O. BOX 5381 OAKLAND CALIFORNIA 94605-0381 T: 1-888-EBPARKS F: 510-569-4319 TRS RELAY: 711 WWW.EBPARKS.ORG

**NOTICE OF PREPARATION (NOP) AND SCOPING SESSION
FOR AN ENVIRONMENTAL IMPACT REPORT FOR:
COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT**

MAY 14, 2018

The East Bay Regional Park District will be the Lead Agency and will prepare an Environmental Impact Report (EIR), pursuant to the California Environmental Quality Act (CEQA), for the proposed Coyote Hills Restoration and Public Access Project. The project site is located in Fremont, Alameda County, along the western frontage of Paseo Padre Parkway, approximately between Ardenwood Blvd. and Dumbarton Circle. The project will amend the park land use plan to expand the park boundary eastward towards Paseo Padre Parkway, restore habitat and develop visitor serving facilities such as trails, parking and restrooms. The project site consists of the approximately 306-acre parcel west of Paseo Padre Boulevard, and immediately adjoining Coyote Hills Regional Park, on its east side, in Fremont CA. An abbreviated Project Description is attached along with a Location Map. The anticipated scope of the EIR is described below.

The EIR will focus on evaluating the topic of Cultural Resources and may also evaluate Transportation/Traffic. All other topical issues will be evaluated in an Initial Study, including: Aesthetics, Agricultural and Forestry Resources, Air Quality and Greenhouse Gas Emissions, Biological Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation/Traffic, Tribal Cultural Resources, and Utilities and Service Systems. The EIR will evaluate project and cumulative impacts, growth inducement, short-term versus long-term impacts, effects on human beings, and alternatives to the project.

The East Bay Regional Park District invites you to comment on the proposed scope of the EIR. **Please send your written comments within 30 days from the date you receive this notice, but no later than June 18th, 2018**, to: Karla Cuero, East Bay Regional Park District, 2950 Peralta Oaks Court, Oakland, CA 94605, or via email: kcuerdo@ebparks.org. You may also contact Karla by telephone at (510) 544-2622.

You may also provide comments at the **EIR Scoping Session, which will be held on Thursday, May 31, 2018 at 6:30PM, at the East Bay Regional Park District’s Board Room at 2950 Peralta Oaks Ct. Oakland CA, 94605.**

The East Bay Regional Park District is the Lead Agency (i.e., the public agency with the greatest responsibility for either approving the project or carrying it out) for the project. This notice is being sent to the State Clearinghouse, other identified responsible agencies, and other interested parties. Other presently known responsible agencies may include: The City of Fremont, Alameda County Public Works Agency, The Alameda County Flood Control and Water Conservation District and The California Department of Fish and Wildlife. When the Draft EIR is published, it will be sent to the State Clearinghouse and to others who respond to this Notice of Preparation (NOP) or who otherwise indicate that they would like to receive a copy, which will be available on the East Bay Parks website, <http://www.ebparks.org>. A Final EIR with responses to comments on the Draft EIR will be prepared prior to final consideration of the proposed projects. Notices of public

Board of Directors

Dennis Waespi President Ward 3	Ayn Wieskamp Vice-President Ward 5	Ellen Corbett Treasurer Ward 4	Dee Rosario Secretary Ward 2	Whitney Dotson Ward 1	Beverly Lane Ward 6	Colin Coffey Ward 7	Robert E. Doyle General Manager
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hearings on the project, and the availability of the Final EIR, will also be provided to NOP respondents, those requesting such notice, and available through the District’s website at <http://www.ebparks.org/about/planning/default.htm#patterson>.

Karla Cuero, Environmental Programs Project Coordinator
East Bay Regional Park District

Board of Directors

Dennis Waespi President Ward 3	Ayn Wieskamp Vice-President Ward 5	Ellen Corbett Treasurer Ward 4	Dee Rosario Secretary Ward 2	Whitney Dotson Ward 1	Beverly Lane Ward 6	Colin Coffey Ward 7	Robert E. Doyle General Manager
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Coyote Hills Restoration and Public Access Project

Abbreviated Project Description

The Project consists of two main actions: 1) approve a Land Use Plan Amendment to include the 306 acre Park Expansion Area to the park; 2) implement habitat restoration and public access improvements to provide visitor facilities (parking, trails, restrooms).

Land Use Plan Amendment

Three Land Use Units are proposed at five locations within the project area. These units include Natural Units, Recreational Units and a new Agricultural Unit. The five locations within the park expansion area include:

- Patterson Slough Natural Unit
- Western Wetlands Natural Unit
- Southern Wetlands Natural Unit
- Historic Patterson Ranch Farm and Farm Yard Agricultural Unit
- Ranch Road Recreation Unit

Habitat Restoration and Public Access Improvements

The proposed plan consist of five elements: 1) Habitat Restoration, Enhancement, and Wildlife Management Activities, 2) Cultural Resources Management Actions, 3) Recreation and Visitor Serving Facilities Construction, 4) Public Access Trails Construction, and 5) Agricultural Land Use and Associated Activities.

1. Habitat Restoration and Enhancement and Wildlife Management Activities

The Patterson Slough area, north of Patterson Ranch Road, would be developed and managed for habitat protection, restoration, enhancement, and wildlife management. Restoration and enhancement in this area includes mixed riparian forest, willow sausal restoration, perennial and seasonal wetlands enhancement, and oak savanna and native grasslands establishment.

Wetlands enhancement would occur within the low lying Western Wetlands area on the west side of the historic Patterson Ranch farm fields. This part of the Project Area contains depressional wetlands that pond water during the winter rainy period, as well as adjacent areas that are saline and sodic (salt and sodium affected).

The previously farmed Southern Wetlands, located from just north of Ardenwood Creek to the southern property boundary, would be restored in cooperation with the Alameda County Flood Control and Water Conservation District as a mix of riparian, freshwater and seasonal wetlands, as well as saline-alkaline wetlands.

2. Cultural Resources Management Actions

Important and known locations of native Californians (Ohlone people) cultural resources occur within the Project Area, and there may be other, presently unknown resources throughout this area. Construction of site facilities would be designed to minimize excavation. There are two historic structures within the Project

Area that will be evaluated in the Environmental Document: 1) the Farm Labor Contractor's residence located immediately adjacent to the lower portion of Patterson Slough, and 2) the Milk House building in the Patterson Ranch Farm Yard area, south of the intersection of Patterson Ranch Road and Paseo Padre Parkway.

3. Recreation and Visitor Serving Facilities Construction

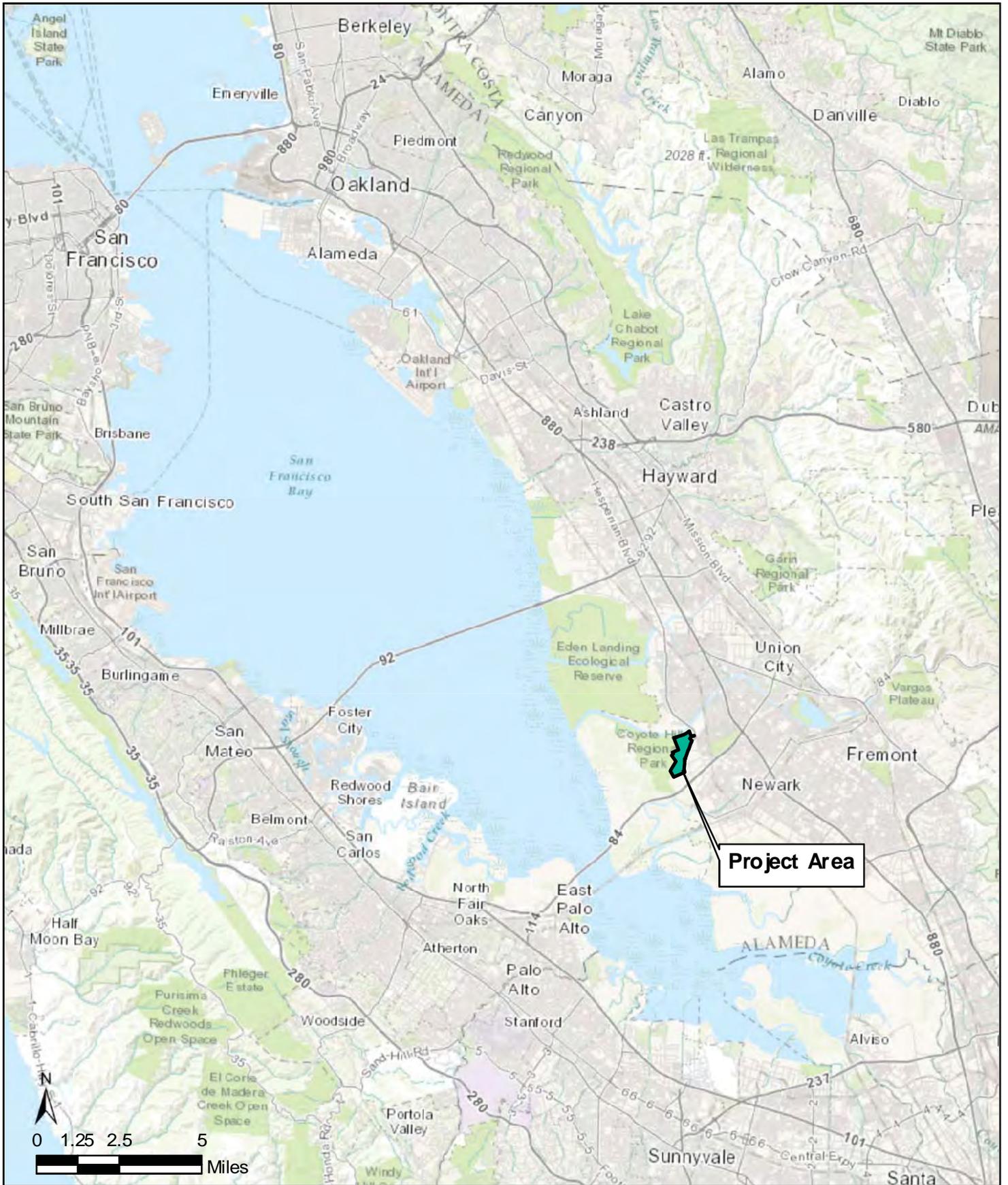
Visitor serving facilities include an approximately 100 car parking lot and open-use area, a new restroom, potable water, picnic area, interpretive elements, and a new entry kiosk. A park entry sign, landscape plantings, and fencing would be installed at the improved Park entry. Pedestrian and bicycle intersection improvements may be provided on the west side of the intersection of Paseo Padre Parkway and Patterson Ranch Road, in coordination with the City of Fremont.

4. Public Access Trails Construction

Approximately four miles of trails are proposed for the Project Area with a continuous north-south shared use trail that traverses the entire area. The trail system includes connections to the Bay Trail along Ardenwood Boulevard and Paseo Padre Parkway, a new connection to the existing Crandall Creek Trail, improving the Tuibun Trail to the Visitor Center, and providing a link to the future Lake Unit and camping opportunities at the former Dumbarton Quarry.

5. Agricultural Land Uses and Associated Activities

The historic Patterson Ranch Farm fields south of Patterson Ranch Road and immediately west of Paseo Padre Parkway would continue to be used for agriculture. The Patterson Ranch Milk House building in the Farm Yard area may be rehabilitated for use as a fresh produce stand or other compatible park serving use.



REGIONAL LOCATION MAP

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT



STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH



EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

Notice of Preparation



June 5, 2018

To: Reviewing Agencies
Re: Coyote Hills Restoration and Public Access Project
SCH# 2018062002

Attached for your review and comment is the Notice of Preparation (NOP) for the Coyote Hills Restoration and Public Access Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Karla Cuero
East Bay Regional Parks District
2950 Peralta Oaks Court
P.O. Box 5381
Oakland, CA 94605

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

**Document Details Report
State Clearinghouse Data Base**

SCH# 2018062002
Project Title Coyote Hills Restoration and Public Access Project
Lead Agency East Bay Regional Parks District

Type NOP Notice of Preparation
Description The project consists of two main actions: 1) approve a Land Use Plan Amendment to include the 306 acre Park Expansion Area to the park; 2) implement habitat restoration and public access improvements to provide visitor facilities (parking, trails, restrooms)

Lead Agency Contact

Name Karla Cuero
Agency East Bay Regional Parks District
Phone (510) 544-2622 **Fax**
email
Address 2950 Peralta Oaks Court
P.O. Box 5381
City Oakland **State** CA **Zip** 94605

Project Location

County Alameda
City Fremont
Region
Cross Streets Paseo Padre Parkway and Patterson Ranch Road
Lat / Long 37° 33' 14.42" N / 122° 04' 15.50" W
Parcel No. 543 0439 00302, 543 0439 03100, 543 0439 03202
Township **Range** **Section** **Base**

Proximity to:

Highways 84 and Interstate 880
Airports
Railways
Waterways Alameda Creek
Schools Lincoln Elementary, Ardenwood Elementary
Land Use Open Space - Resource Conservation/Public

Project Issues Archaeologic-Historic; Traffic/Circulation

Reviewing Agencies Resources Agency; Cal Fire; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Wildlife, Region 3; Delta Protection Commission; Delta Stewardship Council; Native American Heritage Commission; State Lands Commission; California Highway Patrol; Caltrans, District 4; Air Resources Board, Transportation Projects; State Water Resources Control Board, Division of Drinking Water, District 4; Regional Water Quality Control Board, Region 2

Date Received 06/05/2018 **Start of Review** 06/05/2018 **End of Review** 07/05/2018

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH **20180620** 02

Project Title: Coyote Hills Restoration and Public Access Project

Lead Agency: East Bay Regional Park District

Contact Person: Karla Cuero

Mailing Address: 2950 Peralta Oaks Court

Phone: (510)544-2622

City: Oakland

Zip: 94605

County: Alameda

Project Location: County: Alameda

City/Nearest Community: Fremont

Cross Streets: Paseo Padre Parkway and Patterson Ranch Road

Zip Code: 94555

Longitude/Latitude (degrees, minutes and seconds): 37 ° 33 ' 14.42" N / 122 ° 04 ' 15.58" W Total Acres: 306

Assessor's Parcel No.: 543 0439 003 02 543 0439 031 00

Section: _____ Twp.: _____ Range: _____ Base: _____

Within 2 Miles: State Hwy #: 84 and Interstate 880

Waterways: Alameda Creek

Airports: _____

Railways: _____

Schools: Lincoln Elementary, Ardenwood Elementary, and other

Document Type:

- CEQA: NOP
 Early Cons
 Neg Dec
 Mit Neg Dec

- Draft EIR
 Supplement/Subsequent EIR (Prior SCH No.) _____
 Other: _____

- NEPA: NOI
 EA
 Draft EIS
 FONSI

- Other: Joint Document
 Final Document
 Other: _____

Governor's Office of Planning & Research

Local Action Type:

- General Plan Update
 General Plan Amendment
 General Plan Element
 Community Plan
- Specific Plan
 Master Plan
 Planned Unit Development
 Site Plan

- Rezone
 Prezone
 Use Permit
 Land Division (Subdivision, etc.)

- Annexation
 Development
 Coastal Permit

JUN 05 2018

STATE CLEARINGHOUSE

Other: Land use plan Amendment

Development Type:

- Residential: Units _____ Acres _____
 Office: Sq.ft. _____ Acres _____ Employees _____
 Commercial: Sq.ft. _____ Acres _____ Employees _____
 Industrial: Sq.ft. _____ Acres _____ Employees _____
 Educational: _____
 Recreational: (restoration/recreation/public access)
 Water Facilities: Type _____ MGD _____

- Transportation: Type _____
 Mining: Mineral _____
 Power: Type _____ MW _____
 Waste Treatment: Type _____ MGD _____
 Hazardous Waste: Type _____
 Other: _____

Project Issues Discussed in Document:

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Aesthetic/Visual | <input type="checkbox"/> Fiscal | <input type="checkbox"/> Recreation/Parks | <input type="checkbox"/> Vegetation |
| <input type="checkbox"/> Agricultural Land | <input type="checkbox"/> Flood Plain/Flooding | <input type="checkbox"/> Schools/Universities | <input type="checkbox"/> Water Quality |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Forest Land/Fire Hazard | <input type="checkbox"/> Septic Systems | <input type="checkbox"/> Water Supply/Groundwater |
| <input checked="" type="checkbox"/> Archeological/Historical | <input type="checkbox"/> Geologic/Seismic | <input type="checkbox"/> Sewer Capacity | <input type="checkbox"/> Wetland/Riparian |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Minerals | <input type="checkbox"/> Soil Erosion/Compaction/Grading | <input type="checkbox"/> Growth Inducement |
| <input type="checkbox"/> Coastal Zone | <input type="checkbox"/> Noise | <input type="checkbox"/> Solid Waste | <input type="checkbox"/> Land Use |
| <input type="checkbox"/> Drainage/Absorption | <input type="checkbox"/> Population/Housing Balance | <input type="checkbox"/> Toxic/Hazardous | <input type="checkbox"/> Cumulative Effects |
| <input type="checkbox"/> Economic/Jobs | <input type="checkbox"/> Public Services/Facilities | <input checked="" type="checkbox"/> Traffic/Circulation | <input type="checkbox"/> Other: _____ |

Present Land Use/Zoning/General Plan Designation:

Open Space - Resource Conservation/Public

Project Description: (please use a separate page if necessary)

Please see attached sheet.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

- | | |
|---|--|
| <input type="checkbox"/> Air Resources Board | <input type="checkbox"/> Office of Historic Preservation |
| <input type="checkbox"/> Boating & Waterways, Department of | <input type="checkbox"/> Office of Public School Construction |
| <input type="checkbox"/> California Emergency Management Agency | <input type="checkbox"/> Parks & Recreation, Department of |
| <input type="checkbox"/> California Highway Patrol | <input type="checkbox"/> Pesticide Regulation, Department of |
| <input type="checkbox"/> Caltrans District # _____ | <input type="checkbox"/> Public Utilities Commission |
| <input type="checkbox"/> Caltrans Division of Aeronautics | <input type="checkbox"/> Regional WQCB # _____ |
| <input type="checkbox"/> Caltrans Planning | <input type="checkbox"/> Resources Agency |
| <input type="checkbox"/> Central Valley Flood Protection Board | <input type="checkbox"/> Resources Recycling and Recovery, Department of |
| <input type="checkbox"/> Coachella Valley Mtns. Conservancy | <input type="checkbox"/> S.F. Bay Conservation & Development Comm. |
| <input type="checkbox"/> Coastal Commission | <input type="checkbox"/> San Gabriel & Lower L.A. Rivers & Mtns. Conservancy |
| <input type="checkbox"/> Colorado River Board | <input type="checkbox"/> San Joaquin River Conservancy |
| <input type="checkbox"/> Conservation, Department of | <input type="checkbox"/> Santa Monica Mtns. Conservancy |
| <input type="checkbox"/> Corrections, Department of | <input type="checkbox"/> State Lands Commission |
| <input type="checkbox"/> Delta Protection Commission | <input type="checkbox"/> SWRCB: Clean Water Grants |
| <input type="checkbox"/> Education, Department of | <input type="checkbox"/> SWRCB: Water Quality |
| <input type="checkbox"/> Energy Commission | <input type="checkbox"/> SWRCB: Water Rights |
| <input type="checkbox"/> Fish & Game Region # _____ | <input type="checkbox"/> Tahoe Regional Planning Agency |
| <input type="checkbox"/> Food & Agriculture, Department of | <input type="checkbox"/> Toxic Substances Control, Department of |
| <input type="checkbox"/> Forestry and Fire Protection, Department of | <input type="checkbox"/> Water Resources, Department of |
| <input type="checkbox"/> General Services, Department of | <input checked="" type="checkbox"/> Other: State Coastal Conservancy |
| <input type="checkbox"/> Health Services, Department of | <input checked="" type="checkbox"/> Other: FWS (Don Edwards) |
| <input type="checkbox"/> Housing & Community Development | <input checked="" type="checkbox"/> Other: CA Dept of Fish + wildlife |
| <input checked="" type="checkbox"/> Native American Heritage Commission | <input checked="" type="checkbox"/> Other: County Agencies |
| <input checked="" type="checkbox"/> ↳ contacted tribes | |

Local Public Review Period (to be filled in by lead agency)

Starting Date May 14, 2018 Ending Date June 18, 2018

Lead Agency (Complete if applicable):

Consulting Firm: _____ Applicant: _____
 Address: _____ Address: _____
 City/State/Zip: _____ City/State/Zip: _____
 Contact: _____ Phone: _____
 Phone: _____

Signature of Lead Agency Representative:  Date: 05/31/18

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Resources Agency

- Resources Agency
Nadell Gayou
- Dept. of Boating & Waterways
Denise Peterson
- California Coastal Commission
Allyson Hill
- Colorado River Board
Elsa Contreras
- Dept. of Conservation
Crina Chan
- Cal Fire
Dan Foster
- Central Valley Flood Protection Board
James Herola
- Office of Historic Preservation
Ron Parsons
- Dept of Parks & Recreation Environmental Stewardship Section
- S.F. Bay Conservation & Dev't. Comm.
Steve Goldbeck
- Dept. of Water Resources Agency
Nadell Gayou

Native American Heritage Comm.

- Native American Heritage Comm.
Debbie Treadway
- Public Utilities Commission Supervisor
- Santa Monica Bay Restoration
Guangyu Wang
- State Lands Commission
Jennifer Deleong
- Tahoe Regional Planning Agency (TRPA)
Cherry Jacques

Caltrans, District 9

- Caltrans, District 9
Gayle Rosander
- Caltrans, District 10
Tom Dumas
- Caltrans, District 11
Jacob Armstrong
- Caltrans, District 12
Maureen El Harake

Regional Water Quality Control Board (RWQCB)

- RWQCB 1
Cathleen Hudson
North Coast Region (1)
- RWQCB 2
Environmental Document Coordinator
San Francisco Bay Region (2)
- RWQCB 3
Central Coast Region (3)
- RWQCB 4
Teresa Rodgers
Los Angeles Region (4)
- RWQCB 5S
Central Valley Region (5)
- RWQCB 5F
Central Valley Region (5)
Fresno Branch Office
- RWQCB 5R
Central Valley Region (5)
Redding Branch Office
- RWQCB 6
Lahontan Region (6)
- RWQCB 6V
Lahontan Region (6)
Victorville Branch Office
- RWQCB 7
Colorado River Basin Region (7)
- RWQCB 8
Santa Ana Region (8)
- RWQCB 9
San Diego Region (9)

Other Departments

- California Department of Education
Lesley Taylor
- OES (Office of Emergency Services)
Monique Wilber
- Food & Agriculture
Sandra Schubert
Dept. of Food and Agriculture
- Dept. of General Services
Cathy Buck
Environmental Services Section
- Housing & Comm. Dev. CEQA Coordinator
Housing Policy Division

Caltrans - Division of Aeronautics

- Caltrans - Division of Aeronautics
Phillip Crimmins
- Caltrans - Planning
HQ LD-IGR
Christian Bushong
- California Highway Patrol
Suzann Ikeuchi
Office of Special Projects

Transportation Projects

- Transportation Projects
Nesamani Kalandiyur
- Industrial/Energy Projects
Mike Tollstrup

California Department of Resources, Recycling & Recovery

- California Department of Resources, Recycling & Recovery
Kevin Taylor/Jeff Esquivel

State Water Resources Control Board

- State Water Resources Control Board
Regional Programs Unit
Division of Financial Assistance
- State Water Resources Control Board
Cindy Forbes - Asst Deputy
Division of Drinking Water
- State Water Resources Control Board
Div. Drinking Water # 4
- State Water Resources Control Board
Student Intern. 401 Water Quality Certification Unit
Division of Water Quality

Independent Commissions, Boards

- Delta Protection Commission
Erik Vink
- Delta Stewardship Council
Anthony Navasero
- California Energy Commission
Eric Knight

Caltrans, District 1

- Caltrans, District 1
Rex Jackman
- Caltrans, District 2
Marcelino Gonzalez
- Caltrans, District 3
Susan Zanchi - North
- Caltrans, District 4
Patricia Maurice
- Caltrans, District 5
Larry Newland
- Caltrans, District 6
Michael Navarro
- Caltrans, District 7
Dianna Watson
- Caltrans, District 8
Mark Roberts

State Water Resources Control Board

- State Water Resources Control Board
Division of Water Quality
- State Water Resources Control Board
Phil Crader
Division of Water Rights
- Dept. of Toxic Substances Control Reg. #
CEQA Tracking Center
- Department of Pesticide Regulation
CEQA Coordinator

Other

- Other
- Conservancy



2950 PERALTA OAKS COURT P.O. BOX 5381 OAKLAND CALIFORNIA 94605-0381 T: 1-888-EBPARKS F: 510-569-4319 TRS RELAY: 711 WWW.EBPARKS.ORG

March 19, 2018

Wilton Rancheria
Antonio Ruiz, Jr., Cultural Resources Officer
9728 Kent Street
Elk Grove, CA 95624

RE: Request for Information - East Bay Regional Park District Coyote Hills Restoration and Public Access Project, Fremont, Alameda County

Dear Antonio,

I understand that Wilton Rancheria has requested to be notified of all East Bay Regional Park District (EBRPD) projects.

The EBRPD is planning to undertake a habitat restoration and public access project within part of the former Patterson Ranch Property at Coyote Hills Regional Park, Fremont, Alameda County. The historic Patterson Ranch once covered nearly 6,000 acres of farmland along the East Bay shoreline in what is today portions of the cities of Fremont, Union City and Newark. Most of the former ranch has been developed over the past 80 years. The descendants of the Patterson family donated a 296-acre parcel to EBRPD which has increased the area of the regional park by almost one-third. This property, along with a 10-acre parcel purchased in 2016, comprise the 306-acre project area (please see attached map for the project location).

The project area borders much of the eastern boundary of Coyote Hills, extending eastward to Paseo Padre Parkway including approximately 5,000 linear feet of road frontage. Coyote Hills Slough borders the property to the west which is owned and managed by the Alameda County Flood Control District and leased to the EBRPD. The Alameda Creek Regional Trail borders the property to the north just beyond Crandall Creek. The property is bisected by Patterson Ranch Road, with the entry kiosk into Coyote Hills located 0.5 miles west of Paseo Padre Parkway.

The purpose of the proposed project is to restore and enhance ecological habitats and develop public access on the Patterson property at Coyote Hills. Habitat restoration and enhancement will focus on developing self-sustaining ecological habitats with a minimal amount of long-term human intervention. Public access will focus on developing passive recreational facilities that are compatible with restored habitats and that require a minimum level of maintenance. In addition, the Patterson property provides an opportunity to move the park entrance closer to Paseo Padre Parkway to develop a more prominent entry point into one of the District's most heavily visited parks.

Project planning and development has begun and implementation is scheduled to occur in phases. Phase I (2019-2020) will potentially include habitat restoration, construction of a new staging area/parking lot with flush restrooms, relocated entry kiosk, picnic areas, and trails. Subsequent phases are expected to focus on additional restored habitat areas and public access trails and may proceed after completion of the first phase. Further information can be found at: www.ebparks.org/about/planning#patterson.

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Any information provided will be used to determine if significant archaeological resources may be affected by the proposed project under the California Environmental Quality Act (CEQA).

If I can provide any further information, please don't hesitate to contact me at (510) 544-2622 or kcuero@ebparks.org. Thank you for your timely review of our request.

Sincerely,

Karla Cuero
Project Coordinator

cc: Chris Barton, Rachel Sater

Board of Directors

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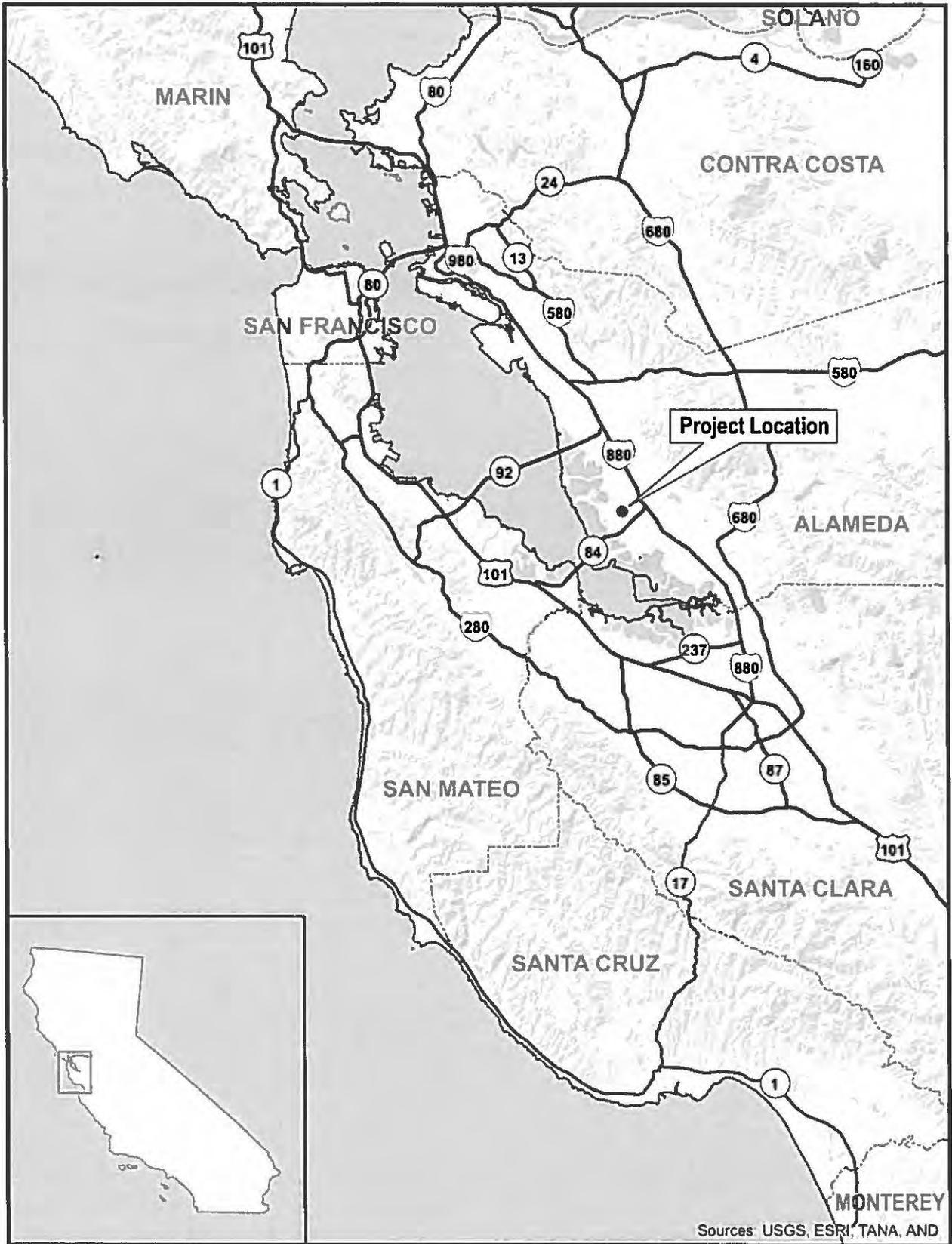
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March 26, 2018

Mr. Andrew Galvan
The Ohlone Indian Tribe
P.O. Box 3152
Fremont, CA 94539

RE: East Bay Regional Park District Coyote Hills Restoration and Public Access Project, Fremont, Alameda County

Dear Andy,

Thank you for your interest in the Coyote Hills Restoration and Public Access Project, and for your participation in the community workshop on August 14, 2017. As part of the next phase of the project, the District will be analyzing the environmental effects of proposed park improvements under the California Environmental Quality Act.

Julie Bondurant, Principal Planner in the Planning Department here at the District, updated me about your meeting with her on March 19, 2018. I understand that you would like to initiate consultation with the District regarding this project.

Please let me know if any of the dates and times below will work for you to meet at our office @ 2950 Peralta Oaks Court, Oakland.

- 1) Monday, April 16th – 1:30-2:30 PM
- 2) Tuesday, April 24th – 1:30-2:30 PM
- 3) Thursday, April 26th – 1:00-2:00 PM

If I can provide any further information, please don't hesitate to contact me at (510) 544-2622 or kcuerdo@ebparks.org. Thank you for your timely review of our request.

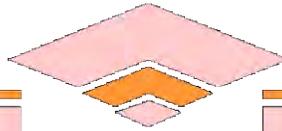
Sincerely,

Karla Cuero
Project Coordinator

cc: Julie Bondurant, Chris Barton, Rachel Sater

Board of Directors

Dennis Waespi President Ward 3	Ayn Wieskamp Vice-President Ward 5	Ellen Corbett Treasurer Ward 4	Dee Rosario Secretary Ward 2	Whitney Dotson Ward 1	Beverly Lane Ward 6	Colin Coffey Ward 7	Robert E. Doyle General Manager
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MUWEKMA OHLONE INDIAN TRIBE

OF THE SAN FRANCISCO BAY AREA REGION

'Innu Huššištak Makiš Mak-Muwekma *"The Road To The Future For Our People"*

May 17, 2018

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FAYE THOMPSON-FREI

TRIBAL ADMINISTRATOR
NORMA E. SANCHEZ

Karla Cuero
Project Coordinator, Environmental Programs
East Bay Regional Park District
2950 Peralta Oaks Court, Oakland, CA. 94605

Dear Karla,

Thank you for notifying the Muwekma Ohlone Tribal leadership about the proposed Coyote Hills Restoration and Public Access Project on East Bay Regional Park District Lands adjacent to Coyote Hills in Alameda County.

As you may already know that this park area cross-cuts and falls within the ethnohistoric boundary of the interior East Bay which includes aboriginal Ohlone-speaking tribal groups along the Fremont Plain and adjacent areas whose people were missionized into Missions Dolores, Santa Clara and San Jose and therefore, have historic and biological ties to the Muwekma Tribe's history and genealogical heritage. These groups include the Alson Seunen, Yrgin/Jalquin, Saclan, Chupcan and /Napiian/Carquin, from which the enrolled Muwekma members are descended from as independently verified by the BIA Office of Federal Acknowledgement in 2002 as part of our petitioning efforts to regain the Tribe's previous acknowledge status. Furthermore, as the only documented previously Federally Recognized Ohlone tribe (positive determination issued by the BIA on May 24, 1996) of the three historic Costanoan tribal communities (Muwekma Ohlone Tribe from Missions San Jose, Santa Clara and Dolores; Amah Mutsun Tribal Band from Mission San Juan Bautista; and Esselen Nation from Mission San Carlos/Carmel), we, along with our over 550 BIA documented tribal members claim this region as part of our ancestral homeland.

Based upon the above, supported by the attached ethnohistoric and **legal** background information about our tribe, we make the following cultural resources management recommendations in dealing with our aboriginal territory and ancestral heritage sites:

1. We support the good efforts by East Bay Regional Park District to conduct this scoping hearing and notice of preparation for an EIR on the 306 acres relative to the proposed Coyote Hills Restoration and Public Access Project.
2. The tribe expects that the Cultural Resources Management firm that is hired has a history of conducting exceptional evaluations and predictive models, rather than being selected as "one of-the-good-old boys" that have over these decades produced

relatively meaningless information relative our Tribe's ancestral heritage sites. We further expect that there will be some potential impacts to both recorded and/or unanticipated to our Tribe's ancestral heritage sites.

3. If any of our ancestral remains are indeed encountered and there are mitigation plans relative to burial recovery, our tribal leadership intends to be fully involved as steward of our ancestral heritage sites.
4. The Muwekma Tribe desires to be kept fully informed on such projects and their outcomes on East Bay Regional Park District Park lands.
5. The Tribal leadership supports any educational related programs relative to our ancestral heritage sites and encourages the development of comprehensive interpretive educational program information about each site and the region for the benefit of the general public and Native people.

Our Tribe would like to eventually explore the development of an educational interpretive program with EBRPD relative to these ancestral heritage sites specifically that also includes information about the larger geographic region surrounding the ethnohistoric territory of the Alson and TuibunOhlone-speaking Tribal groups who were engaged in a circum San Francisco Bay/Delta region ceremonial and economic interaction sphere during pre-contact and post contact periods of time.

SOME HISTORIC BACKGROUND ON THE MUWEKMA OHLONE TRIBE AND ITS RELATIONSHIP TO THE REGION SURROUNDING THE LIVERMORE VALLEY, THE LUECHA OHLONE TRIBAL TERRITORY AND THE GREATER EAST BAY

The Muwekma Ohlone Tribe is comprised of all of the surviving lineages who are aboriginal to the San Francisco Bay region and whom were missionized into Missions Dolores, Santa Clara and San Jose. The Muwekma Tribe became Federally Recognized through the Congressional Homeless California Indian Appropriation Acts of 1906 and 1908 and later years, and the Tribe was identified as the Verona Band of Alameda County by the Indian Service Bureau and later was under the jurisdiction of the Reno, and Sacramento Agencies between 1906 to 1927. Muwekma families enrolled with the BIA under the 1928 California Indian Jurisdictional Act and all of the applications were approved by the Secretary of Interior. Muwekma families later enrolled with the BIA during the 1948-1957 and 1968-1970 enrollment periods and those applications were also approved by the Secretary of Interior as well.

THE ARMIJA/THOMPSON FAMILIES: HISTORY AND ANCESTRY (DESCENT FROM THE ALSON OHLONE AND NEIGHBORING TRIBAL GROUPS (Magdalena Armija Thompson BIA Application # 10296)

Elias Armijo (Joseph Aleas) and **Delfina Guerrera** were full blooded Ohlone Indians and the parents of Maria Flora, Eduardo (Avelino), Margarita, Juan, Chrysanto, Magdalena and Gregonia Maria Armija. Both Elias and Delfina were listed on the **1870 Census** as living in Murray Township, Alameda County (page 103A, household # 59) on the Alisal Rancheria. At the top of the same census page are listed A. Burnell (**Augustin Bernal**) and his family (household #58). The next series of entries on the same census page identify some of the other **Verona Band** Indian households living on the **Alisal Rancheria**. The first family listed below A. Burnell (Bernal) is (#59) Alius, Hosea (Aleas, Jose), Indian, age 25 (b. 1845); his wife, Delfina, Indian, age 17 (b. 1853); and their two children Flora (age 4) and Avelino (Eduardo), age 1 (b. 1869) [1870 Census, Murray Township, Alameda County, page 103A].

The Armija's appear again 10 years later on the **1880 Census** living in Centerville, Washington Township, as Jose Aleas, Indian, age 37; Delfina, Indian, wife, age 23; and children: Maria Flora (age 18), Jesus Eduard (age 8), Maria M(arget) (age 7), Juan C. (age 6), Chrisantos (age 4), Maria M(agdalena) (age 3), and Maria (Gregonia) (age 2 months) [1880 Census, Alameda County, page 517A].

On the **1900 Indian Population Census** Washington Township, Alameda County, Jose and Delfina Armija's eldest son, Eduardo Armija, is listed under his mother-in-law Josepha Maria (Head of household), along with his second wife Jonah (Chona Bautista), and their son Narcisco; also listed are Eduardo's younger brother, Chrysantos and his wife Belle (Izabel Villanen); and Thomas Duncan (who was later married to Petra Inigo (Phoebe Alaniz) in 1903 (see Inigo family below) [Washington Township, page 291B].

Also listed on the **1900 Indian Population Census** for neighboring Murray Township (in Livermore) are **Phoebe Enigo** (Petra Inigo/Phoebe Alaniz) and her daughter, Mary Guzman. Living at Phoebe Inigo's residence (probably the same house that Susanna Nichols was born in) is **Magdalena Marshall (Armija/Thompson)**, who is identified as Lena Matlo, (widowed, age 22, b. May 1878). Petra Inigo was also the godmother to Magdalena's first child Rosa Bernal in 1895 (see below). At this time, Magdalena is pregnant with her son Henry Macho (Marshall) who was born on Dec. 11, 1900. Although not formally married to Joseph Machado (Marshall), Henry would be the first of two sons she had with him (see below). Also listed along with Magdalena is Carrie Matlo. Carrie Matlo is actually Carrie Calista Peralta, who was born October 14, 1898, and was the daughter of Magdalena's older sister, Margarita Armija and her second husband Antonio Peralta (see below). Petra Inigo was Carrie's godmother (see below). Petra Inigo and Carrie's Aunt Magdalena had taken the responsibility for caring for her, because according to Carrie's older sister, Belle Stokes Nichols and brother, Joseph Aleas' BIA applications (#s 10300 and 10299), their mother, Margarita died sometime around 1900 (Murray Township, page 23A).

Magdalena Armija is later listed on **Kelsey's 1905-1906 Indian Census** as "**Marthelina Marshall**" with one child (presumably her son Henry Marshall). She is also listed on the special Indian Census of 1905-1906 as living in Niles and "without land".

By 1908 or 1909 Magdalena married Ernest Thompson Sr. The **1910 Census** lists Ernest Thompson (Head of household), Lena, wife (age 33) and two children, Flora (1) and Henry Marshall (9) as living on Mission San Jose Road. Living next to them is Peter Sattos (Juarez) and his wife, Maggie (see Margarita Pinos), and Maggie's niece, Laura (Peregrina Pinos Santos' daughter, Erolinda Santos; (also see Daniel Santos' 1917 St. Augustine's baptismal record, Erolinda is identified as Laura Guarez below).

Jose Elias Armija's Family Lineage

Based upon the censuses and mission records, the family lineages of Jose Aleas and Delfina have been traced back several generations to the Seunen Ohlone tribe (Dublin/Livermore region) the "del estero" Alson Ohlone Tribe (Fremont/Milpitas/north San Jose plain) and the Tamcan Tribe (Byron region). Jose Aleas like many of the Indians of the **Verona Band** had many names and variations of the spelling of his name. He was known as Elias Armija, Jose Aleas, Jose de la Cruz Elias and others.

Jose Elias' father was Silvestre (Avendano) who was born February 26, 1800. It was from the baptismal information of his siblings Ancieto and Fermin that we know that they were from "del estero" which is the Fremont Plain within the **Alson Ohlone Tribal** territory:

1800 Feb 26, #292 **Silvestre**, Mission (del estero)
Born: Feb 26, 1800
Father: Crisanto (neofitos)
Mother: Crisanta
Godparents: Teodora Peralta

By 1842, Perpetua Ssauechequi married Silvestre Avendano sometime before 1842 and they had a son named Jose Elias who was baptized at Mission San Jose:

1842 Nov 6, #8167, **Jose Elias**
Born: Oct 1842 (1 month old)
Father: Silvestre Avendano (MSJ # 292)
Mother: Perpetua (MSJ # 1636)
Godparents: Carlos Berrelleza & Maria Josefa Galindo

The records of Jose Elias' father was **Silvestre Avendano** who was baptized as Silvestre at Mission San Jose (MSJ Bapt. #292), and was of the **Alson Ohlone Tribe** which was located on the Fremont Plain.

Delfina Armija's Family Lineage

Delfina's ancestry is more complete than her husband Jose Elias Armija. Mission San Jose records indicate that Delfina's father was **Francisco Solano** and that his lineage is traced to the **Chupcan Tribe** of **Mt. Diablo/Walnut Creek** area and to the **Seunen Ohlone Tribe** of the **Dublin/Livermore** region. Francisco Solano's father was Primo Vueslla of the Suenen Tribe, his mother was Remedia Lal-iapa of the Chupcan Tribe.

By 1818 Primo and Remedia married and Remedia gave birth to at least two children: Ynez and Francisco Solano.

1819 Mar 17, #3970 **Ynez** (Neofitos)
not stated
Primo (#887)
Remedia (#1757)
Godparents: - Aurelia

Note: Ynez married Jose Liberato, her second husband, on June 26, 1840 (SJM #2391) and she was the grandmother of Chona Bautista Armija Andrade and great-grandmother to Cecelia Armija.

1828 Apr 8, #5881, **Francisco Solano*** (Neofitos)
Apr 7, 1828 (born day before)
Primo (#887)
Remedia (#1757)
Godparents: -
Note: "llamada Tivasia...Hermana de Chiquetu..."

*Jose Guzman and Maria Colos shared with Harrington on October 14, 1929, the following recollections [probably dating back to around the time of the 1870 Ghost Dance] about the brother-in law of Francisco Solano, named Martin:

Martin was *cunado* (brother-in-law) of Inf's *tio* Francisco Solano. The wife of Martin was sister of Francisco Solano. Martin was good to land on top of the sweat house above San Leandro -- both inf. and Jose have heard him. He was an Akwena. He used to come to Pleasanton at times to. He was sermonero Iso (?) they called them in. Call it echando sermon. Might say also espichero. Buenas cosas hablan -how could I tell you all he says - aconsejando la gente, to all the people, to instruct man and woman heard all he said from temascal top there (Harrington reel 36:504).

Francisco Solano married Maria Soledad Castro. After considerable review of the Mission records there appears to be two Maria Soledads who possibly became the spouse of Francisco Solano and mother of Delfina.

Francisco and Soledad had the following four children together:

1849 Apr 29, #8415, **Maria de Jesus (Solano)**

Born: Mar 1849 (2 months old)
Father: Francisco Solano
Mother: Soledad
Godparents: Maria de la Cour & Guadalupe Bernal

1851, Jul 24, #8467, **Delfina Sobien (Solano)**

Born: Feb, 1851
Father: Solano Jobien (Sobien)?
Mother: Soledad Cloc (Castro)
Godparents: Simon Roe & Maria Miranda

Note: Delphina was the mother of the Armija children (see below)

1856 Mar 22, #5735B, **Jose Pascual (Solano)**

Born: Dec 1855 (4 months at baptism)
Father: Francisco Solano
Mother: Maria Soledad
Godparents: Jose Caterino & Maria Nestava

Note: Jose Caterino was Leopardo/Rupardo Leyo's younger brother and Maria Nestava is probably Jose Elias (Aleas') first cousin (Perpetua's sister's daughter; see above).

1862 Oct, #224, **Maria Benita Solano**

Born: Sep 16, 1862
Father: Francisco Solano
Mother: Soledad
Godparents: Hippolito Suares & Refugia

Note: Benita (Benedicta) was the mother of Peregrina and Margarita Pinos. (see below)

Delfina married Jose Aleas (**Elias Armija**) around 1866/67 and later had the following children together:

1869 December, # 807, **Eduardo Armigo (Armija)**

Born: October 3, 1869
Father: Elias Armigo
Mother: Delphina Maria
Godparents: Porfinio Valensuela and C.(atherine) Gonzales*

*Note: Catherine Gonzales was the second wife of Philippe (Felipe) Gonzales (Petra Inigo's grandfather)

Eduardo Armija was first married to **Francisca Luecha** and they had a son named Joseph Armijo together (see below). The Luecha Ohlone Tribe was aboriginal to the Livermore area and whom were mostly missionized into Mission Santa Clara.

--1890 Nov 23, **Joseph Armijo (Garcia)***
Born: November 1, 1890
Father: Eduardo Armijo
Mother: Francisca Luecha*
Godparents: Antonio Silva and Maria B. Yurrera (Benedicta Guerrera).

Note:* It appears that based on documentary evidence, Joseph Armijo was the same person as Angela Colos' grandson, Joseph Garcia who was raised on the Pleasanton/Alisal Rancheria and who was the father of Thomas Garcia and Alfonso Juarez and Daniel Santos.

Joseph Garcia after his baptism at Mission San Jose in 1890, next appears in the Book of Half Orphans at St Joseph's Orphanage at Mission San Jose dated December 1898. His was identified as **Joseph Garcia**, 8 years old, admitted May 30, 1898, discharged June 24, 1898, Indian, Place of Residence "Near Pleasanton." He appears next on the **Indian Population Census of 1900** for Murray Township, identified as the grandson of **Angela Colos** who was listed as **Uncela Carlans**. Joseph Garcia was identified as being 9 years old and being born **November, 1890**. Joseph and Angela were living next to Phoebe Inigo, her daughter Mary Guzman, Magdelina Armija Marshall and her niece Carrie Calista Peralta and they were living several *casitas* away from his godmother, Benedicta Guerrera Pinos on the Alisal Rancheria.

Joseph Garcia next appeared at Pleasanton with his grandmother, **Angela Colos** on the **1905-06 Special Indian Census** which was conducted by Special Indian Agent C. E. Kelsey. Kelsey identified them as Angela Colos and **grandson**. They were living next to Trinidad Gonzales and Miguel Santos.

Angela Colos and **Joseph Garcia** next appeared on the **1910 Indian Population Census of "Indian Town"** in Pleasanton Township, Alameda County. On this census Joseph Garcia, age 20, was identified as Angela Colos' nephew. They were living next door to **Jacoba**, Catherine Peralta, Dario Marine, Beatrice Marine, **Mercedes Marine** and Frank Guzman.

Prior to April 1912, Mercedes Marine (Muwekma Vice Chairwoman Monica Arellano's great-grandmother) was no longer with Francisco Arellano with who she had two children: Albert and Edwina. By this period of time Mercedes was with Joseph Garcia and they had a child named Thomas Garcia. After the death of Mercedes in 1914.

--1913 Feb 23, Page 39 **Joseph Thomas Garcia** [St. Augustine]
Born: Dec 29, 1912
Father: Joseph Garcia
Mother: Mercedes Marino
Godparents: Jesus Espinosa & Phoebe Inigo (Alaniz)

Note: Thomas Garcia's grave location at the Golden Gate National Cemetery. He is located in Section Q Site 59. Thomas served in the US Army (Private) from July 30, 1942 to November 27, 1945.

Note: Francisca Luecha, Joseph Garcia's mother, was one of the last Luechas carrying her tribal name as a surname. The Luecha Ohlone tribe were aboriginal to the southern Livermore Valley (possibly around the Del Mocho Rancheria) and were brought into Missions Santa Clara and San Jose. Jose

Guzman informed Harrington that he learned the *Clareño* Ohlone dialect from the Luechas and the Santos families (Harrington notes see below).

Approximately six years later, Eduardo Armija, married Chona Bautista (Andrade) (BIA Application # 10297), and they had three children together including a baby girl named **Cecelia Armija** (see Marine Family History).

--1901 Mar 24, Page 140, **Cecelia Armijo**

Born: Jan 24, 1901
Father: Eduard Armijo
Mother: Concepcione Gonzales
Godparents: Carlos Nichols & Susanna Flores

Note: Eduardo Almeca (Edward Armija) was stabbed by Antonia Santo(s) at the True Vineyard was reported in the **Livermore Herald** on Dec. 7, 1901 (see below), apparently he later died from these wounds because on his daughter Cecelia's BIA application (see BIA Application # 10637) she testified that her father died around 1901. Cecelia Armija would first marry Lucas Marine prior to January 27, 1920. She later married Dario Marine around 1926, when Dario's wife Catherine Peralta went to live with Lucas and they had Ernest Marine together. On her BIA application, Cecelia said that she was born in Niles.

Jose Elias Armija and Delfina next have their third child, Margarita Armija in 1871. **Margarita Armija** was born on March 11, 1871 and passed away around 1900. Her godparents were Parelос Seyo and Valeriana Seyo who are **Rupardo Leyo** and Valeriana Carmelo (Leyo). She was the mother of Isabelle S. Olivares (Belle Stokes) and Joseph Aleas (see below).

1872 June, #1029, **Margaret Armijo**

Born: March 11, 1871
Father: Elias Armijo
Mother: Delfina Agorrera (Guerrera)
Godparents: Parelос Seyo and Valeriana Seyo

Note: Parelос Seyo is Rupardo Leyo (Leopardo), who is also the grandfather of Susanna Nichols and Francisca Nonessi. Rupardo's second wife was Valeriana Carmelo.

Margarita Armija has a relationship with Joseph Olivares and they have two children together, Belle Stokes Nichols and Joseph Aleas:

Belle Nichols (BIA Application # 10300) born 2-19-1890. Belle was the wife of Joseph Nichols (Susanna Nichols' son). On her BIA application, she stated that her maiden name was **Belle Stokes** and that her mother was Margarita Armija who died about 1900. She also stated that she is the niece of Magdalena Thompson. Phoebe Alaniz and (Magdalena's oldest daughter) Flora Emma Thompson Martel signed as witnesses for her on her BIA application on October 7, 1930. Belle's Mission San Jose Baptism record identifies her as Isabelle S. Olivares. The S. in her middle name most likely was Stokes:

--1890 March 12, **Isabelle S. Olivares** (Indian)

Born: February 19, 1890
Father: Joseph Olivares
Mother: Margarita Armija
Godparents: Emmanuel Pastor* and Susanna Flores

Note: Manuel Pastor and wife are listed by Kelsey at Pleasanton 1905-1906.

By 1919 (based upon the information on the 1930 census) Belle Stokes Armija (Margaret Armija's daughter) had married Joe Nichols, however they had no children. On the **1930 Census** Belle (age 40) and Joe Nichols (age 48) were living on “J” Street in Niles, four houses from Susanna Nichols household.

Joseph Francis Aleas (BIA Application # 10299) was born 5-11-1893, near Pleasanton. His mother was Margarita Armija and he lists Elias Armija and Delfina Guerrero Armija as his mother's parents. He also stated that "I am the full brother of Belle Nichols, Niles, Ca. I am a nephew of Magdalena Thompson, Newark, Alameda County, Ca. Flora Emma Thompson Martel signed as a witness on **October 11, 1931**.

--1893 Aug 20, Page 20, **Elliam (Joseph Aleas) Ermijia (Armija)** (Indiano)**

Born: May 11, 1893
Father: Incognito (probably Joseph Olivares)
Mother: Margarita Esmijia (Armija)
Godparents: Antonius Sasuro & Jacoba Hilibra*

Note: Jose Antonio and Jacoba were Joseph Aleas' godparents.

June 30, 1916 - Joseph Aleas served in the US Army during World War I, and made rank as “Sergeant in Company D, (14th Infantry Brigade) 21st Machine Gun Battalion, 7th Division.” His Army record indicates that he enlisted on June 30, 1916 (age 23) in San Jose, California and was discharged at Camp Funston, Kansas on July 9, 1920. Joseph was awarded the World War Victory Medal and the Bronze Victory Button. Information about the 21st Machine Gun Battalion, 7th Division is provided below. (see 7th Division information below)

1920 Census - Joseph Aleas was still residing at Camp Funston, Riley, Kansas when the **1920 Census** was taken on February 23rd. The information on the census shows the U. S. 7th Division, Joseph Aleas, age 26, soldier, 21st Machine Gun Battalion.

On the **1930 Census**, **Joseph Aleas** was living in Newark, on **County Rd.** near Thornton, he was single, age 37, **Indian** “Full Blood, Digger), and working as a “stove mounter” at a stove foundry (this was the same work done by Pete Juarez at this time). He is also identified as a Veteran of WWI.

April 26, 1942 – Joseph Francis Aleas (Serial # U937) was living at the Butler Hotel in Newark, California. His WW II Registration Card stated that he was born in Pleasanton, California on May 11, 1893 and his contact person was George Butler of Newark. His employer was James Graham Manufacturing Co. of Newark. Joseph was age 48, height 5’9 1/2” and weighed 190 lbs.

July 13, 1964 - Joseph Francis Aleas passed away **July 13, 1964** and was buried at the Gold Gate National Cemetery Plot Z, grave 2597).

In 1876, Jose Elias and Delfina had another son named Joseph.

1876 December 8, #1476, **Joseph Chrisanthum*** (Indian)

Born: October 31, 1876
Father: Elia Armigo (Elias Armija)
Mother: Delfina Simona Guerrero
Godparents: Michael de Pastor & Eccelsa de Pastor (Celsa)

*Note: **Chrysanto Armija** and Belle were listed on the **1900 Indian Population Census** for Washington Township (Niles). Chrysanto was identified as Chris Armica married, age 24 and Belle Armica was identified as being married, age 33 and having one child, however, the child is not identified and could not be Rosa. Five years later, Chrysanto was listed on **Kelsey's 1905-1906 Indian Census** as Chrysanto Amigo. Although Chrysanto was listed as being single, living in Niles and "without land", on the other side of "Santos, Teresa and child" (probably Joseph Nichols, Teresa Santos and Andre Nichols born 1905; see above), Kelsey identified "Kid Small" and "Belle" whom no doubt were his child Rosa and his wife Izabel Villanen. Chrysanto was presumably living close by to his sister **Magdalena Armija** (identified as Marthelina Marshall) in Niles on the Kelsey Census.

Chrysanto Armija was listed on the **April 16, 1910 Census for Washington Township** as **Chistorpher Armego** living on Sheridan Road near Mission San Jose Road. He was living 12 houses away from Pete and Maggie Juarez and his sister Magdalena Armija and Ernest Thompson (then living of Mission San Jose Road).

Almost two years later, Chrysanto Armija died on **March 6, 1912** from "pulmonary tuberculosis." He was identified as Chris Armigo on his death certificate which provided the following information: he was treated in the Alameda County Infirmary in San Leandro, listed as divorced, date of birth November 1, 1875, age: 36 years, 4 months, 5 days, Laborer, birthplace: California, father: Joe L. Armigo, mother: Delphina, informant: Ino. **S. Martin**(?) and was to be buried in the **Centerville Cemetery**. In the Burial Permit Book for Mission San Jose and Niles (1909-1920) it stated that he was buried on March 8, 1912 and Burial Place: "Indian, Mission San Jose."

A year and a half later, Jose and Delfina have another child named Maria Gregorian Magdalena.

1878 September 8, # 1708, **Gregorian Magdalena Armigo** (Armija) [Indian]
Born: May 26, 1878
Father: Elia Armigo
Mother: Delfina Herrera (Guerrera)
Godparents: Thomas Enigo and Maria Trinidad Gonsales (Gonzales)

Magdalena (Armija) Thompson (BIA Application # 10296) was a full blooded Indian born 5-27-1877. Her BIA application list her children as Emily Thompson (b. 10-31-1910), Ernest Thompson (b. 4-21-1912), Eduardo Thompson (b. 7-21-1914), and Lorenzo (Lawrence) Thompson (b. 9-9-1918). Ernest Thompson Sr. (an American) was her husband at the time of her enrollment. Earlier in 1895, Magdalena had a daughter with Antonio Bernal. Joseph Marshall (Machado) [died about 1928] was her first husband and they had two sons named Roberto and Henry Marshall. Some time around 1908 she married Ernest Thompson. On her BIA application she identified her father as Elias Armija (died about 1880) and her mother as Delfina (Armija) Guerrero (died about 1884). Both of them were born in Alameda County. Delfina's mother was Soledad Guerrero (Maria Soledad Castro). Phoebe Alaniz (Petra Inigo) witnessed her application on October 7, 1930 that she knew Magdalena and her mother for 45 years. Magdalena's children were:

---1895 Jan 26, **Rosa Bernal** (Indian)
Born: Nov 20, 1894
Father: Antonio Bernal
Mother: Magdalena Armina (Armija)
Godparents: Manetta Cosmo (Manuel Santos?) & Petra Igo (Inigo)

---1901 Feb 10, Page 139, **Henrique Macho** (Indians) [Henry Marshall]
Born: Dec 11, 1900

Father: Joseph Macho (Marshall)
Mother: Helena Harremiga (Magdalena Armija) "Indians"
Godparents: Charles Nikles (Nichols) & Maria Thereza

Notes: Henry Marshall went by the name Henry Noya Marshall. There was a Joseph Noya who was a godfather to several of the Muwekma/Verona Band members (see Ernest Marine 1926). Henry Marshall was not living with his mother and stepfather Ernest Thompson at the time BIA enrollment in 1929-1932. On Henry's son Joseph Marshall's birth certificate. The family was living on 309 E. 22nd Street in Oakland and Henry worked as a punch press operator for Kilroy Machine Co. Henry did enroll during the 1968-1972 enrollment period on March 10, 1969. At the time of his enrollment (Application 20833) the family was living at 1618 Graham Way in San Leandro. Henry identified Ernest Thompson as his ½ brother.

Henry Marshall's Family History

Sometime around 1924, Henry Marshall married Anna King of Newark and they had their first child Henry Vernon Marshall on June 27, 1925 and their daughter, Mary Gloria Marshall on September 3, 1926. Both children were baptized at St. Edwards Church in Newark:

--- 1925 August 15, Page 63, **Henry Vernon Marshall** [St. Edwards]*

Born: June 27, 1925
Father: Henry Marshall
Mother: Anna King (Newark)
Godparents: Joe Nichols & Rose Drennan (King)

Henry Marshall, Jr.'s BIA # is F12397. Henry served in the United States Marine Corps (Sergeant) during WW II in the Pacific Theater (Lynn Stinnett interviewed 8/16/06). Henry Marshall, Jr. passed away on September 24, 1986 and is buried in Castro Valley (Lone Pine or Tree Cemetery).

Henry Noya Marshall Sr's Social Security Application dated December 3, 1936 identifies him as living at 641 Ash St. Newark, Ca. He was working at James Graham Mfg. Co. Newark, Ca. Age 36, born December 11, 1900, Centerville, Alameda County, Father: Joseph Noya Marshall; mother Madalaine Armeha (Magdalena Armija).

On the **1930 Census, Washington Township, Newark Town**, Henry Marshall, Sr. (age 28), was living on Thorton Avenue with his sister Flora Emma Thompson Martin (Martel) (age 21), her husband Joseph Martin and their daughter Laura May Martel. Living in the same household was Henry's wife Anna King (17), their son Henry, Jr. (5), daughter Gloria (3 ½), and Anna's sister Rosie King. Both Henry Marshall and his sister, Flora were identified as In(dian) by Census taker Etta M. Biddle. Henry worked as a "stove mouter" for the "stove foundry." Fay says Henry worked at Wedgewood in Newark.

Henry Marshall, Sr. **died in 1982** and according to his daughter Margaret Ariza, he was cremated and his ashes were scattered over Sunol.

Sometime around 1908, Magdalena married Ernest Thompson. Ernest Thompson worked for Southern Pacific Railroad and helped provide a stable household for Magdalena's family. In 1909, Ernest and Magdalena have their first child together, a daughter named Emily. Emily went by her middle name Flora during her lifetime.

---1909 July 10, Page 40, **Emila Flora** (St. Augustine)

Born: March 7, 1909
Father: Ernest Thompson

Mother: Madelena Amigo
Godparents: Jose Rejis (Reyes) & Margarita Pinos

Flora Emma Thompson Martel (BIA Application #10294) was born 3-7-1909 and is listed with her daughter Laura May Martel (born 3-2-1928). She listed her maiden name as Flora Emma Thompson and her father as Ernest Thompson and mother Magdalena (Armija) Thompson. Magdalena Thompson and Joseph Alias (Aleas) are witnesses on her application dated October 11, 1931.

---1910 Dec 10, Page 261, **Maria Amelia Tomson (Emily Thompson)**

Born: Oct 29, 1910
Father: Henrico Tomson
Mother: Magdalena Armija
Godparents: Eulalio Gonzales* & Margarita Pinos

*Note: Eulalio (Eulario) Gonzales was Maggie Pinos' Uncle (see BIA Application # 10676)

Emily Dewey died in 1981. Her obituary stated that:

“... She was 71. Mrs. Dewey was a native of Sunol and had worked at the Sunco Cafe. She is survived by two daughters. Maxine Blair and Jackie Dewey, both of Fremont, two brothers, Lawrence Thompson and Ernest Thompson, both of Oakland, nine grandchildren, and seven great-grandchildren. ... Burial will be at Irvington Memorial Cemetery.”

---1912 Aug 25, Page 287, **George Ernest Thompson** (Newark)

Born: Apr 20, 1912
Father: Ernesto Thompson
Mother: Madelina Armija
Godparents: Georgus & Peregrina Santos

Ernest Thompson worked as a security guard after Alcatraz Island prison closed. He passed away in **1984**. His son Karl Thompson is a Muwekma Tribal Councilman.

---1914 Aug 22, Page 312, **Eduard Thompson**

Born: Jul 24, 1914
Father: Ernesto Thompson
Mother: Madeleina Adanica (Armija)
Godparents: Raymondus & Dora Musquez

Note: Edward Thompson never married and passed away on March 21, 2002 and was buried on March 26, 2002.

---1916 Dec 16, Page 333, **Charles Thompson**

Born: Aug 10, 1916
Father: Ernest Thompson
Mother: Magdalena Thompson
Godparents: Margarita Pinos & Petrus Juarez

Note: Charles Thompson died as a child and is buried in the **Ohlone Indian Cemetery** on Washington Boulevard, Fremont (see interview with Lawrence Thompson, Sr. and Marine Family History 1965).

September 12, 1918 - Draft Registration Card - George Ernest Thompson, residing in Newark, Alameda County, age 44, dob: September 3, 1876, Stock Clerk for Jason Graham Co., Newark, wife: Madeline Thompson. Newark. Hayward Draft Board.

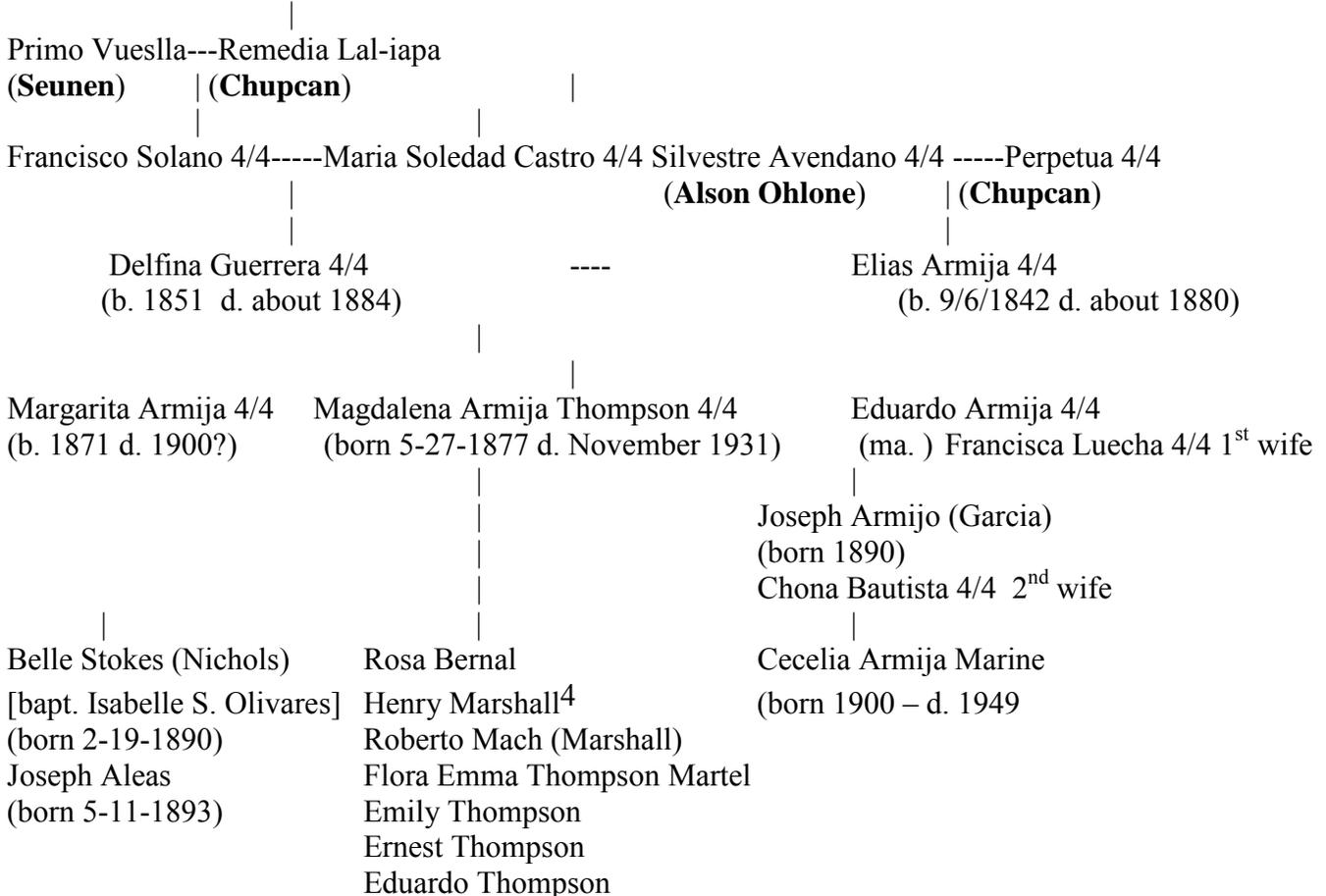
1918 --- Lorenzo (Lawrence) Thompson
 Born: Sep 9, 1918
 Father: Ernest Thompson
 Mother: Magdalena Armija Thompson

Lawrence Thompson was a Tribal Elder and an elected Tribal Councilman. He was living in San Francisco when he enlisted at the age of 23 on September 10, 1941 at the San Francisco Presidio. Lawrence attained the rank of Technician Fifth Grade (Dog Tag 39 011 265) served in the Pacific Theater in the 640th Tank Destroyer Battalion, U.S. Army. He was honorably discharged on October 2, 1945 at Camp Beale, Marysville, California and received the **American Defense Service Medal, Asiatic Pacific Campaign Medal** and **Philippine Liberation Ribbon with Bronze Star**.

Magdalena Armija Thompson passed away shortly after she enrolled with her family with the BIA in November 1931. She was buried at the Holy Ghost/Centerville Cemetery on November 23, 1931. Her grave is located at aisle 25, row 6B. Mr. Ernest Thompson, Sr. after Magdalena's passing had married Trina Marine around 1933.

The families descended from Magdalena Armija Thompson are enrolled in the Muwekma Tribe. **The Armija Family Ancestry** is traced through several generations of Indians. The following is a basic genealogical tree:

Radegunda (Chupcan Tribe/Bay Miwok)



MARIA DE LOS ANGELES COLOS' FAMILY: HISTORY AND ANCESTRY WITH TIES TO THE LUECHA OHLONE TRIBE

Maria de los Angeles (Angela) Colos was one of the principal Chocheño Ohlone-speaking linguistic consultants for many anthropologists. She was interviewed by Kroeber (1904 and 1909), C. Hart Merriam (1905-1910), E. W. Gifford (1914), J. A. Mason (1916) and J. P. Harrington (1921-1930). Maria died prior to 1930 (around 1929), before she was able to enroll with the BIA.

Maria de los Angeles's ancestry has been traced through her recollections and **Mission Santa Clara** and **Mission San Jose** records. Maria was the daughter of Zenon (a neophyte from Mission San Rafael who was probably of Napián/Karkin or Choquoime ancestry), and **Joaquina Pico** (whom Maria thought was a Tamaleño meaning Coast Miwok). Joaquina who as a young woman most likely worked for Antonio Maria Pico who was the **Alcalde of Pueblo de San Jose** and also for the Bernal family while residing on their Santa Teresa Rancho located in south San Jose. Later Joaquina Pico settled and worked on the Rancho de San Ramon (perhaps living on or near the East Bay San Lorenzo Rancheria). After the departure or death of her husband Zenon, a Koriak Russian man, named Gregorio Colos, lived with Joaquina and helped raise the children and they took on his surname. Perhaps even earlier, based upon John Peabody Harrington's interview with Angela in the late 1920s when Joaquina was most likely widowed, an Ohlone Indian named Santiago Piña became Angela's stepfather.

By her own accounting to Harrington, Maria de los Angeles said that she was born on the ranch of **Don Agustín Bernal in Santa Theresa**, south San Jose. Angela informed Harrington that she learned to speak Chochenyo from her step-father, Santiago and his parents. Santiago's lineage has been traced through the Mission San Jose records. Santiago's parents were **Bruno** and **Fermina**. Bruno (SJO-B 201) was born 1796 and his tribal group was identified as "Este" in the Mission San Jose Baptismal records [referring to the **Taunan Ohlone Tribe of the Alameda Creek and Del Valle Creek drainages (Sunol/Pleasanton/Livermore region)**]. Bruno was baptized at Mission San Jose on July 27, 1799 and the record identifies his Indian name as **Chaucsacsi**. Bruno's godfather was *Californio* Luis Maria Peralta (**Rancho San Antonio, Peralta Land Grant** of the greater Oakland area). Bruno's parents were identified as Homum (gentile not baptized) and his mother Garbasi (SJO-B 747). Bruno died on February 2, 1823 (SJO-D 2964).

Fermina (SJO-B 1520) was born around 1801 and was identified as a **Luecha** (Ohlone) on her Mission San Jose baptismal record dated January 21, 1806 [also see Francisca Luecha below] whose tribal territory included the **del Mocho/Corral Hollow Creek** drainages of the greater Livermore area (see Milliken 1995). Fermina's Indian name was Lapermin and the Mission San Jose records indicate that she died on June 19, 1823 (SJO-D 3011). Her father whose Indian name was Sonoc was also from the **Luecha** Ohlone Tribe. He was baptized with the Christian name Onesimo at Mission San Jose on February 17, 1806 and he later died in August 1815.

Santiago Pina (SJO-B 4075) himself was born November 6, 1819, baptized a day later and was raised by the *Californio* Pina family, hence his surname. The Pina surname might actually have been Pico as in the case of his wife Joaquina Pico or taken from Corporal Lázaro Piña who had come to California in 1819 and received the Rancho Aqua Caliente land grant in Sonoma County by Governor Juan Alvarado in 1840. Santiago Pina's death date was not recorded in the mission records, therefore he must have lived at least through the late 1850s or 1860s and possibly later. Joaquina as stated above worked for the Pico family living in San Jose as one of the Indian servants and she eventually moved to the Bernal Rancho located in the Santa Teresa Hills, where Angela was born.

Mission Santa Clara records indicate that Maria de los Angeles' parents, Zenon and Joaquina, were married at the Mission in 1838. Joaquina was listed as a neophyte from Mission San Jose.

1838 October 16, #2711, Zenon & Joaquina

"En 16 de 8bre de 1838 en la Yglecia de esta Mision...case y vele a los siguientes...A un Neofito (orginario de la Mision de S[an] Raf[ae]l y residente en el Rancho de los Vernaes) llamado Zenon con una Neofita de S[an] Jose llamada Joaquina."

Angela's given name was Maria Asuncion de los Angeles. Angela shared with Harrington the tragedy of the death of her younger brother, Prudencio (Ponciano) who died at the age of 14 of a hemorrhage on Moraga's Ranch, in the East Bay. She also informed Harrington that her "younger half-sister, Maria Antonia Pina" grew up in San Rafael on the Dona Maria Jesus Briones ranch and died there (handwritten notes:47-48).

1840 Feb 2, MSJ #7774, **Maria Asuncion de Los Angeles [Mission San Jose]**

Born: nina
Father: Zenon
Mother: Joaquina
Godparents: Anacleto

1846 May 4, MSJ#8370, **Ponciano (Yndigeno)**

Born: Dec 1845 (6 months old)
Father: Zenon
Mother: Joaquina
Godparents: Manuel & Maria Presentacion

1848 May 15, MSJ#8401, **Maria Antonia (Neofitos)**

Born: Apr 18, 1848
Father: Zenon
Mother: Joaquina
Godparents: Jose Vicente Estudillo & Juana Martinez

~ **1858 - Ramon Sunol.**

On the **1880 Census** for **Murray Township (Pleasanton)**, Alameda County (District 26), an Indian man named **Ramon Sinol (Sunol)**, estimated age 22 (born ca. 1858) was listed as a farm hand in the house hold of John Kottinger. Ramon (Raymond) Sunol was in all likelihood Angela Colos' and Raymundo Sunol's son, **Joseph** who was born in 1862 (see below).

By 1862, Maria de los Angeles had a child with Jose (Raymundo Bernal/Sunol?), a son named Joseph who was baptized at Mission San Jose. Based upon mission baptismal and marriage records Maria's husband was most likely Jose Raymundo Bernal, a Clareño Ohlone Indian who was baptized at Mission Santa Clara (see below).

1862 Oct 26, #225, Page 46, **Josephus (Indios)**

Born: Sep 26, 1862
Father: Jose (Raymundo Bernal)
Mother: Maria de los Angeles
Godparents: Petura? (Vincent?) & Refugia

In the Alisal Indian rancheria community there was a Clareño Ohlone man named Raymond Bernal, who was also identified in other San Jose Mission records as Raymond Sunol. **Mission Santa Clara** baptismal records identified a child by the name of Jose **Raymundo** (Bernal) who was baptized on April 10, 1842 (MSC Baptism # 10219). He was identified as the son of (Jose?) **Domingo Bernal** and **Maria Tacia Sunol** who were both listed as “neofitos”. His godparents were *Californio* **Antonio Bernal** and Eusebia Valencia. Milliken suggests that his parents were most likely baptised at Mission San Jose. Raymundo Bernal was married to a Mission San Jose woman named Angela Cornelia (who appear to be Angela Colos). Angela would have been age 22 or 23 in 1862 at the time of Joseph’s birth (see above baptismal record).

~**1866 – Francisca Luecha**. Based upon the 1880 Census, Angela Colos and Raymundo had a daughter named Francisca (Luecha) sometime around 1866. Angela would have been age 26 at this time. Francisca probably took her surname from Santiago Pina’s mother’s tribe -- the Ohlone-speaking **Luecha**.

~**1869 – Juana**. Also based upon the 1880 Census, Angela and Raymundo had a second daughter named Juana sometime around 1869. Angela would have been around age 29.

Raymundo Bernal (Sunol) and Maria de Los Angeles Colos had their second son, named Joaquin, in 1871. He was baptized at Mission San Jose in 1872:

1872 May 15, #1046, Page 211, **Joaquino Guadalupe Sunol*** (Indiei)

Born: Jul 7, 1872 (probably 1871)
Father: Raimundi Sunol
Mother: Angela Cornelia (Colos)
Godparents: Franciscus Garcia & Jesus M. Refugio

*Note: Joaquin was listed on the **1900 Washington Township [Niles] Indian Population Census** as **Jauloopa Sunol** (age 27). He was living next to Muwekma Ohlone ancestor George Santos and his family in Niles. Raymundo and Lupe Bernal were both remembered by Muwekma Elder Dario Marine in 1965 when he identified the Ohlones of California as the Tribe was involved in protecting their Ohlone Indian Cemetery located in Fremont.

In 1873, Maria de los Angeles and Raymundo Bernal (Sunol) joined with other Muwekma Indian couples of the **Verona Band** to renew their marriage vows at Mission San Jose. As mentioned elsewhere, this was done during the height of the **1870 Ghost Dance** religious movement and these renewal of vows might have been influenced by the Ghost Dance doctrine which was practiced at Pleasanton.

1873 May 30, #212, Page 62, Jose cum Refugia - This entry holds three marriages.

"Die 30, May 1873, coram Maria Selio et Raimundo consentium renovavares J.o Jose cum Rafaela; 2. **Reimendums Bernal (Sunol) et Maria de los Angeles** 3. Maria con Selso.

In 1875, Raymundo and Angela had their third son, Eduardo and his was baptized at Mission San Jose in 1875:

1875 Dec 19, #1378, Page 262, **Eduardo Sunol***

Born: Oct 13, 1875
Father: Raymundo Sunol

Mother: Maria (de los Angeles)
Godparents: **Philippo & Maria Catharina Gonzales**

*Note: Eduardo (age 5) was listed on the 1880 Census as the “grandson” of Felipe and Catherine Gonzales (his godparents).

A half year later, in 1876, Angela apparently was widowed from Raymundo Sunol (Bernal) and shortly married Joseph Thomas Matthia Volvono. In this marriage record, Angela is identified as being around 35 years old (making her birth date 1841). This Mission San Jose marriage record clearly identifies her as Maria los Angeles Colos.

1876 June 8, #281, Page 76, **Volvono et Colos** (Indigeni)

"A.D. 1876, die 8 Junii, Rev. J. Valentini mat jinxit **Joseph Thomas Matthaenum** natam annos circiter 40, ex Francisco Volvono* et Maria Rufina, et **Maria los Angeles Colos**, viduam Joannis, natam annos circita 35, ex **Zenone** et **Maria Joaquina** coram Petro Antonio et Johanna Maria Rubio.

*Note: Francisco Volvono kept his tribe's name (**Volvon**), in the same way the **Luechas** kept theirs. The Volvon were aboriginal to the Mt. Diablo region with presumable marriage ties to the surrounding tribal groups

In 1877, Joseph Matteos and Angela Colos had a daughter named Aloisia (Luisa):

1877 Sep 30, #1575, Page 285, **Aloisia** (Indian)

Born: Aug 25, 1877
Father: Josepho Thomas
Mother: Maria de los Angeles
Godparents: Josephus M. Morales & Maria C. Morales

On the 1880 Census for Murray Township (Pleasanton) Angela was listed as a **widow** and living with her daughters: **Francisca** (Luecha), Indian, age 14 (born ca. 1866), Juana, Indian, age 11 (born ca. 1869), Louisa (Aloisia?), Indian, age 6, Rita (Aloisia?), Indian, age 2. Angela Colos and her family were living eight houses away from Antonio Bernal, Jr. near Pleasanton.

In 1883, Angela Colos had been widowed since at least 1880 and she appears to have given birth to another son with an Indian man named Luiz Miranda (possibly the brother of Monica Miranda):

1883 Sep 23, **Liviano Tiburcio** (Indian)

Born: Aug 11, 1883
Father: Luiz Miranda
Mother: Maria de los Angeles
Godparents: Ignacio Jusiho (Vinoco)? & Monica Miranda

Francisca Luecha: one of Angela Colos' Daughters

Little details are known about the life and family of Muwekma Ohlone Francisca Luecha, however based upon various records she is the daughter of Maria de los Angeles Colos. Francisca was perhaps the last person of her tribe who carried the **Luecha** name. The Luecha, as mentioned above, was a Chocheño Ohlone-speaking Tribe which was aboriginal to the southern Livermore Valley centering around Arroyo del Mocho (an area that probably included the del

Mocho Rancheria) and Corral Hollow Creek drainages. In the 1920s and 1930s Muwekma Elders Jose Guzman and Angela Colos shared with J. P. Harrington what information they knew about the Mission Santa Clara **Santos** families whom were from the Luecha Tribe.:

Based upon Angela and Jose Guzman's recollections, the **Santos Family** appear to be aboriginal to Santa Clara Valley and are possibly related to Juan and Elena Santos (the last Ohlone Indians baptized at Mission Santa Clara) whose son Camilo (MSCL-B #10923) was baptized in 1849 by the mission Fathers. This possibility helps tie in Angela's statement that "**the Clareños and Chocheños were much intermarried, their languages were similar, Muwekma - La Gente**". Harrington's Clareño notes cites the following: "Infs (Maria de los Angeles) comadre **Maria Ventura** and an uncle of hers named **Santos** ... both of them were baptized at Santa Clara Mission" (323 printed notes).

As mentioned above, Francisca Luecha appeared in the Mission San Jose records as a godparent, for Dominic Sierra:

1882 Aug 27, Page 107, **Dominic Sierra**
Born: Aug 4, 1882
Father: Paulo J. Sierra
Mother: Vincentia Jali
Godparents: Raymond Sunol & **Francisca Luecha**

In 1884, Francisca Luecha had a daughter with Francisco Alta Miranda who was baptized at Mission San Jose in 1884:

1884 Apr 27, Page 144, **Maria Rita Miranda** (Indian)
Born: Apr 5, 1884
Father: Francisco Alta Miranda*
Mother: **Francisca Luecha**
Godparents: Maria Antonia Lunes (probably Suarez)

Six years before Muwekma Elder Eduardo Armija married Muwekma Chona Bautista, he had a child with Francisca Luecha named Joseph Armijo in 1890. Joseph was baptized at Mission San Jose that same year:

1890 Nov 23, Page 264, **Joseph Armijo** * (Indian)
Born: Nov 1, 1890
Father: Eduardo Armijo
Mother: **Francisca Luecha**
Godparents: Antonio Silva & Maria B. Yurrera (Benedicta Guerrero)

*Joseph Armijo was for some unknown reason (perhaps through mis-hearing his name) later renamed Joseph Garcia at the Mission san Jose's St. Joseph's Orphanage. He was raised on the Pleasanton/Alisal rancheria and later was the father of Muwekma Mercedes Marine's son Joseph Thomas Garcia and Muwekma Erolinda Santos's eldest sons Alphonse Juarez and Daniel Santos (Saunders).

[**1898**] Joseph Armijo/Garcia next appears after his baptism at Mission San Jose, on the **Book of Half Orphans at St Joseph's Orphanage, Mission San Jose in December 1898**. His was identified as "Joseph Garcia, 8 years old, admitted May 30, 1898, discharged June 24, 1898, Indian, Place of Residence near Pleasanton."

[1900] He appears next on the **Indian Population Census of 1900** for Murray Township (Alisal Rancheria Pleasanton). He was identified as “Joe Carsise” and was listed as the **grandson** of Angela Colos who herself was identified as “Uncela Carlans”. Angela was also identified on the census as having given birth to 12 children. Joseph was listed as being 9 years old and being born **November, 1890**, the same month and year as Joseph Armijo’s birth. Joseph Garcia and Angela Colos were living next to Muwekma Indians Phoebe Inigo, her daughter Mary Guzman, Joseph’s aunt Magdalena Armija Marshall and her niece Carrie Calista Peralta and living several casitas [houses] away from them on the rancheria was his godmother Benedicta Guerrero Pinos.

[1905-1906] Joseph Garcia next appeared still living on Pleasanton Alisal Rancheria with his grandmother Angela Colos on the **1905-06 Special Indian Census** conducted by C. E. Kelsey. Kelsey identified them as Angela Colos and grandson. They were living next to Muwekma Indians Trinidad Gonzales (Phoebe Inigo’s mother) and Miguel Santos.

[1910] Angela Colos and Joseph Garcia next appeared on the **1910 Indian Population Census of “Indian Town”** in Pleasanton Township. On this census Joseph Garcia was identified as Angela’s nephew and age 20. They were living next door to Muwekma Indians Jacoba Antonio, Catherine Peralta, her husband, (D)ario Marine, Beatrice Marine, **Mercedes Marine (see below)** and Frank Guzman. Also listed on this census Muwekma Indians Miguel and Selsa Santos, **Albert Marine**, Phoebe Inigo, Trinidad Gonzales and Jose Reyes.

Mercedes Marine was born in 1895 and *Capitan* Jose Antonio and *Mayen* Jacoba were her godparents at Mission San Jose. Sometime after the death of her mother Avelina Cornates Marine in October 1904, Jacoba helped raise Mercedes (see 1910 Indian Census).

1895 Oct 19, Page 65, **Maria Mercedes Marin***

Born: Sep 2, 1895
Father: Joafaele [Rafael] Marin
Mother: Abelina Cornates (Avelina Cornates)
Godparents: Josephus Antius Sasugo & Jacoba Kilibury
(*Capitan* Jose Antonio & Jacoba Sasuyo)¹

Mercedes Marine had two children with Francisco Arellano and afterwards her third with Joseph Armija/Garcia. Both Joseph Garcia and Mercedes Marine were living next to each other on the Alisal Rancheria in 1910.

Mercedes Marine and Francisco Arellano had their first son, Alberto Marine Arellano on January 13, 1909 and he was baptized at Mission San Jose:

--1909 August 8, **Alberto Areano** (Arellano)

Born: Jan 13, 1909
Father: Francisco Areano
Mother: Mercedes Marin
Godparents: Pedro Gonsalves & **Maria Neis*** (Suarez/Santos)

Their second child was named Edwina Arellano who was baptized at St. Augustine's Church in Pleasanton in 1911:

--1911 Feb 1, Page 23 **Edwina Dias** (Arellano) [St. Augustine]

Born: Jun 29, 1910

Father: Franciscus Dias
Mother: Mercedes Marino
Godparents: Isabella (Elizabeth) Marino

Mercedes third child, Joseph Thomas Garcia was born in 1912 and baptized at St Augustine's Church in 1913:

--1913 Feb 23, Page 39 **Joseph Thomas Garcia** [St. Augustine]
Born: Dec 29, 1912
Father: Joseph Garcia
Mother: Mercedes Marino
Godparents: Jesus Espinosa & Phoebe Inigo (Alaniz)

Thomas Garcia grew up in Livermore area, worked for the railroads, and served in World War II in the U.S. Army, **Co. F. 358th Engineers Regiment**. He died on **February 9, 1956** and was buried in the Golden Gate National Cemetery. Thomas Garcia was Angela's one of three surviving great-grandsons.

THE MUWEKMA MARINE-RELATED LINEAGES FROM THE EAST BAY

The greater Oakland, San Leandro, Castro Valley, Hayward, Lafayette, Concord and Walnut Creek areas have specific meaning to the enrolled lineages in the Muwekma Ohlone Tribe. One of the direct ancestors was **Liberato Culpecse** who was from the **Jalquin** and **Saclan** tribal territories of the greater east Bay region. Liberato's mother, **Obdulia Jobocme** who was also of the **Jalquin Ohlone [Chocheño]**-speaking tribal group was baptized at Mission Dolores (SFB # 2436) on May 17, 1802. Liberato's father, **Faustino Poylemja** was from the **Saclan** Bay Miwok-speaking tribal group, and he too was baptized at Mission Dolores on December 18, 1794.

It was into the complex and rapidly changing world of the emergent Hispanic Empire, that Liberato Culpecse, at the age of 14 years old (born 1787) was baptized on November 18, 1801 at Mission Dolores, along with other members of his tribe. Seven years later in 1808, Liberato Culpecse had married his first wife **Catalina Pispisoboj** and she died three years later on October 16, 1811. Catalina's family was from the **Huchiune Ohlone [Chocheño]**-speaking (from the **Oakland-Richmond** area) and the Habasto Coast Miwok-speaking tribal groups.

After the death of his wife, Liberato was allowed to relocate to the Mission San Jose region, where he met his second wife **Efrena Quennatole**. Efrena Quennatole who was **Napian/Karquin Ohlone** was born in 1797 and she was baptized at Mission San Jose on January 1, 1815 at the age of 18 years. Father Fortuny had married Liberato and Efrena (who by then was a widow) on July 13, 1818.

Liberato Culpecse and Efrena Quennatole had a son named **Jose Liberato Dionisio** (a.k.a. **Liberato Nonessa**). Liberato and Efrena later had a daughter named **Maria Efrena** in 1832. Both Jose Liberato Dionisio and Maria Efrena married other Mission San Jose Muwekma Indians. Liberato Dionisio's second wife was **Maria de Jesus** who was the daughter of **Capitan Rupardo Leyo (Leopardo)** and was the younger sister of **Capitan Jose Antonio**. Liberato Dionisio and Maria de Jesus had several children including **Francisca Nonessa Guzman**, born May 7, 1867.

Maria Efrena had married an Indian man named **Panfilo Yakilamne** (possibly from the **Ilamne** Tribe of the Sacramento Delta region) and they had several children including their youngest daughter **Avelina Cornates (Marine)**. During the late 19th and early 20th centuries, **Francisca Nonessa Guzman** and **Avelina Cornates Marine** became two the founding matriarchs of the present-day Guzman and Marine lineages. They, along with the other tribal families, comprised the historic **Federally Recognized Verona Band of Alameda County** tribal community residing at the following East Bay rancherias: San Lorenzo, Alisal (Pleasanton), Del Mocho (Livermore), El Molino (Niles), Sunol, and later Newark.

Avelina Cornates Marine was born in November 1863 and baptized at Mission San Jose on January 17, 1864. By the late 1880s she had met **Raphael Marine**. Avelina Cornates and Raphael Marine had nine living children by 1903, six of whom have surviving descendants who are presently enrolled in the Muwekma Tribe.

During the early 1940s the great-great-grandson of Liberato Culpecse (b. 1787) and Efrena Quennatole (b. 1797), via their daughter **Maria Efrena** (b. 1832), and her daughter **Avelina Cornates Marine** (b. 1863), through her daughter **Mercedes Marine Arellano** (b. 1895), to her son, **Albert Marine Arellano** (b. 1909 on the Alisal Rancheria) had built his house in **Russell City (Hayward)**. There the Arellanos grew up and raised their families there. Today, many of the Arellanos as well as other members of the Tribe reside within their ancestral **Jalquin** Ohlone territory thus demonstrating a continuous “occupation” of this area of the Tribe’s ancestral homeland.

Another major lineage enrolled in the Muwekma Tribe is the **Armija/Thompson** lineage. Direct ancestors of the Armija/Thompson lineage have been traced back several generations to the **Seunen** Ohlone [**Chocheño**]-speaking Tribal group (Dublin/Livermore region) the “del estero” **Alson** Ohlone [**Chocheño**]-speaking Tribe (Fremont/Milpitas/north San Jose plain), **Chupcan** Bay Miwok-speaking Tribal group (centering around the **Mount Diablo** region and Clayton), and to the **Tamcan** North Valley Yokut-speaking Tribe (Byron region).

By 1910 Belle Stokes (Armija) was living and working as a “Servant” for a private family on Central Avenue in the City of Alameda. Later Belle moved to back to Niles and married another Muwekma Indian man named Joe Nichols. Belle enrolled with the BIA in 1930 and identified her tribal affiliation as “**Olanian**” (Ohlone) to BIA Examiner Fred Baker.

The descendants of Magdalena Armija Marshall Thompson are enrolled in the Muwekma Tribe.

East Bay Rancherias

During the mid-19th Century Muwekma ancestors resided on several East Bay rancherias. One of these was located near Mount Diablo in Contra Costa County. On the 1852 census for Contra Costa County at the end of the census it notes “Rancheria of Indians – Monte Diablo” and on another portion of the census is a total enumeration of Indian Males – 156, Indian Females – 122.” Later listed on the **1880 census** for Township #1 Contra Costa County was a Muwekma ancestral family of Augustine Peralta (Indians) who is all likelihood to the surname of Luis Maria Peralta. Also listed in Augustine’s household was **Thomas Peralta** (Indian) [Page 28, District No. 2, and Enumeration Dist. No. 45]. Thomas Peralta had later married **Leona Guzman** (daughter of **Jose Guzman** and **Angustia Lasoyo** who in turn was the daughter of **Capitan Jose Antonio**). Thomas Peralta and Leona Guzman later had a daughter named **Catherine Peralta**. Catherine Peralta later married **Dario Marine** and their grandchildren are enrolled in the Muwekma Ohlone Tribe.

Another one of the other major historic rancherias was established in the San Leandro/San Lorenzo area. It was referred to as the **San Lorenzo Rancheria** (aka **the Springs**). Mission San Jose records document the fact that after the death of **Liberato Culpecse** (see above), his wife **Efrena Quennatole** had remarried and they lived on the San Lorenzo Rancheria. One of their children was a son named Ybon who was known as **Miguel Santos**.

On the **1880 Census**, **Miguel Santos** (age 40); Maria (Celsa), wife, age 35; Hosa S. (Jose Santiago), son, age 15; Maria (Antonia), daughter, age 7; Vincent (Jose Antonio), son, age 5; and Pappoose, son, age 5/12, (born January 1880), were residing in Brooklyn Township, north of the San Leandro Creek near the old San Lorenzo Rancheria, possibly near the old town of **Fitchburg** (now Oakland).

In the 1880s, the **Hearst** family purchased part of the old Bernal Rancho/Landgrant containing the **Alisal Rancheria** and Mrs. Phoebe Apperson Hearst permitted the 125 Muwekmas living at Alisal to remain on the land, and even employing some of them to do her laundry.

During the early part of the 20th century, the Muwekma Ohlone Indians (later identified as the Verona Band by the BIA) became **Federally Recognized** and appear on the Special Indian Census conducted by Agent C. E. Kelsey in 1905-1906

Concurrently, during this period of time, Mrs. Hearst was responsible for funding the fledgling Department of Anthropology at U.C. Berkeley. Dr. Alfred L. Kroeber, one of the early pioneering anthropologists, became known as "the Father of California Anthropology" interviewed some of the knowledgeable speakers of the Indian languages amongst the Mission San Jose Indians in the East Bay beginning in 1904.

Shattering the Myth that the Muwekma Ohlone were Never Federally Recognized

In 1989 The Muwekma Tribe sent a letter to the Branch of Acknowledgement and Research in order to have the tribe's Acknowledged status restored. After eight years in the petitioning process, and after the submittal of several thousand pages of historic and legal documentation, on May 24, 1996 the Bureau of Indian Affairs' Branch of Acknowledgment and Research (BAR) made a positive determination that:

Based upon the documentation provided, and the BIA's background study on Federal acknowledgment in California between 1887 and 1933, **we have concluded on a preliminary basis that the Pleasanton or Verona Band of Alameda County was previous acknowledged between 1914 and 1927**. The band was among the groups, identified as bands, under the jurisdiction of the Indian agency at Sacramento, California. The agency dealt with the Verona Band as a group and identified it as a distinct social and political entity.

On December 8, 1999, the Muwekma Tribal Council and its legal consultants filed a law suit against the Interior Department/BIA – naming Secretary Bruce Babbitt and AS-IA Kevin Gover over the fact the Muwekma as a previously Federally recognized tribe it should not have to wait 20 or more years to complete the reaffirmation process.

In 2000 – D.C. District Court Justice Ricardo Urbina wrote in his **Introduction of his Memorandum Opinion Granting the Plaintiff's Motion to Amend the Court's Order** (July 28, 2000) and **Memorandum Order Denying the Defendants' to Alter or Amend the Court's Orders** (June 11, 2002) that:

“The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Century, the Department of the Interior (“DOI”)

recognized the Muwekma tribe as an Indian tribe under the jurisdiction of the United States.” (Civil Case No. 99-3261 RMU D.D.C.)

On October 30, 2000, response by the Department of Interior’s Branch of Acknowledgment and Research/Tribal Services Division of the Bureau of Indian Affairs to Justice Urbina’s Court Order regarding the Muwekma Ohlone Tribal enrollment and descendency from the previous Federally recognized tribe, BIA staff concluded:

“... . When combined with the members who have both types of ancestors), **100% of the membership is represented.** Thus, analysis shows that the petition’s membership can trace (and, based on a sampling, can document) its various lineages back to individuals *or to one or more siblings of individuals* appearing on the 1900, “Kelsey”, and 1910 census enumerations described above.”

On July 25, 2002, Congresswoman Zoe Lofgren issued her “Extension of Remarks” on the floor of the House of Representatives stating:

“The Muwekma Ohlone Indian Tribe is a sovereign Indian Nation located within several counties in the San Francisco Bay Area since time immemorial.

In 1906, the Tribe was formally identified by the Special Indian Census conducted by Indian Agent C. E. Kelsey, as a result of the Congressional Appropriation Act mandate to identify and to purchase land for homeless California Indian tribes.

At this time, the Department of Interior and the Bureau of Indian Affairs federally acknowledged the Verona Band as coming under the jurisdiction of the Reno and Sacramento Agencies between 1906 and 1927.

The Congress of the United States also recognized the Verona Band pursuant to Chapter 14 of Title 25 of the United States Code, which was affirmed by the United States Court of Claims in the Case of Indians of California v. United States (1942) 98 Ct. Cl.583.

The Court of Claims case judgment instructed the identification of the Indians of California with the creation of Indian rolls. The direct ancestors of the present-day Muwekma Ohlone Tribe participated in and enrolled under the 1928 California Indian Jurisdictional Act and the ensuing Claims Settlement of 1944 with the Secretary of the Interior approving all of their enrollment applications.

Meanwhile, as a result of inconsistent federal policies of neglect toward the California Indians, the government breached the trust responsibility relationship with the Muwekma tribe and left the Tribe landless and without either services or benefits. As a result, the Tribe has suffered losses and displacement. Despite these hardships the Tribe has never relinquished their Indian tribal status and their status was never terminated.

In 1984, in an attempt to have the federal government acknowledge the status of the Tribe, the Muwekma Ohlone people formally organized a tribal council in conformance with the guidelines under the Indian Reorganization Act of 1934.

In 1989, the Muwekma Ohlone Tribal leadership submitted a resolution to the Bureau of Indian Affairs’ Branch of Acknowledgment and Research with the intent to petition for Federal

acknowledgment. This application is known as Petition #111. This federal process is known to take many years to complete.

Simultaneously, in the 1980's and 1990's, the United States Congress recognized the federal government's neglect of the California Indians and directed a Commission to study the history and current status of the California Indians and to deliver a report with recommendations. In the late 1990's the Congressional mandated report – the California Advisory Report, recommended that the Muwekma Ohlone tribe be reaffirmed to its status as a federally recognized tribe along with five other Tribes, the Dunlap Band of Mono Indians, the Lower Lake Koi Tribe, the Tsnungwe Council, the Southern Sierra Miwuk Nation, and the Tolowa Nation.

On May 24, 1996, the Bureau of Indian Affairs pursuant to the regulatory process then issued a letter to the Muwekma Ohlone tribe concluding that the Tribe was indeed a Federally Recognized Tribe.

In an effort to reaffirm their status and compel a timely decision by the Department of the Interior, the Muwekma Ohlone Tribe sued the Bureau of Indian Affairs. The Court has mandated that the Department issue a decision this year. That decision is expected in early August.

Specifically, on July 28, 2000, and again on June 11, 2002, Judge Ricardo Urbina wrote in his Introduction of his **Memorandum Opinion Granting the Plaintiff's Motion to Amend the Court's Order** (July 28, 2000) and **Memorandum Order Denying the Defendants' to Alter or Amend the Court's Orders** (June 11, 2002) affirmatively stating that:

“The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Century, the Department of the Interior (“DOI”) recognized the Muwekma tribe as an Indian tribe under the jurisdiction of the United States.” (Civil Case No. 99-3261 RMU D.D.C.)

I proudly support the long struggle of the Muwekma Ohlone Tribe as they continue to seek justice and to finally, and without further delay, achieve their goal of their reaffirmation of their tribal status by the federal government. This process has dragged on long enough. I hope that the Bureau of Indian Affairs and the Department of Interior will do the right thing and act positively to grant the Muwekma Ohlone tribe their rights as a Federally Recognized Indian Tribe.

The Muwekma Ohlone Tribe has waited long enough; let them get on with their lives as they seek to improve the lives of the members of this proud tribe. To do anything else is to deny this tribe Justice. They have waited patiently and should not have to wait any longer.” (Congresswoman Zoe Lofgren 2002)

On September 21, 2006, another victory was handed to the Muwekma Tribe by Judge Reginald Walton, U.S. District Court in Washington, D.C. stating:

“The following facts are not in dispute. Muwekma is a group of American Indians indigenous to the San Francisco Bay area, the members of which are direct descendants of the historical Mission San Jose Tribe, also known as the Pleasanton or Verona Band of Alameda County (“the Verona Band”). ... From 1914 to 1927, the Verona Band was recognized by the federal government as an Indian tribe. ... Neither Congress nor any executive agency ever formally withdrew federal recognition of the Verona Band. ... “

In conclusion, although the Muwekma Tribe was not reaffirmed by a hostile Bureau of Indian Affairs in Washington, D.C., nonetheless, the tribe is continuing to exercise its sovereignty and authority as a Recognized Tribe. Therefore, once again thank you for contacting our Tribal office with regards the proposed projects and we would like for you to include in its educational program accurate and updated historic and legal information about our Tribe. In the past we have been troubled by the generic treatment about our history and heritage, which is usually fraught with myths, stereotypes and much outdated information usually cited from Malcolm Margolin's interpretive fantasy *The Ohlone Way*, and Levy's section "Costanoan" in the *Handbook on North American Indians*, Vol. 8. 1978.

Should you have any additional questions or would like to obtain primary documentation, please contact our tribal office and we shall comply with your request.

Sincerely,

Charlene Nijmeh, Chairwoman

Cc: Muwekma Tribal Council

Cultural Resources file EBRPD proposed Coyote Hills Restoration and Public Access Project

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

MUWEKMA TRIBE,

Plaintiff,

v.

BRUCE BABBITT,,
Secretary of the United States Department
of the Interior, and

KEVIN GOVER,
Assistant Secretary for Indian Affairs,
United States Department of the Interior,

Defendants.

Civil Action No.: 99-3261 (RMU)

Document Nos.: 27, 28

MEMORANDUM OPINION

Granting the Plaintiff's Motion to Amend the Court's Order

I. INTRODUCTION

The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Century, the Department of the Interior ("DOF") recognized the Muwekma Tribe as an Indian tribe under the jurisdiction of the United States. In more recent times, however, and despite its steadfast efforts, the Muwekma Tribe has been unable to obtain federal recognition, a status vital for the Tribe and its members. Without federal recognition, the Tribe cannot receive the benefits of health care, housing, economic development, and self-governance that the United States provides to federally recognized tribes. *See* Pl.'s Mot. for Summ. J. at 2; 25 C.F.R. § 83.2.

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

MUWEKMA OHLONE TRIBE,)	
)	
Plaintiff,)	
)	
v.)	
)	Civil Action No. 03-1231(RBW)
DIRK KEMPTHORNE, ¹)	
Secretary of the Interior, <u>et al.</u> ,)	
)	
Defendants.)	
)	

MEMORANDUM OPINION

The Muwekma Ohlone Tribe (“Muwekma,” “the Tribe,” or “the plaintiff”)² brings this action under the United States Constitution and the Administrative Procedure Act (“APA”), 5 U.S.C. §§ 554, 701-706 (2000), seeking review of the “Final Determination Against Federal Acknowledgment of the Muwekma Ohlone Tribe” (“Final Determination”), 67 Fed. Reg. 58,631 (2002), issued by the Department of the Interior (“DOI” or “the Department”),³ which declined to

¹ Pursuant to Federal Rule of Civil Procedure 25(d)(1), the Court has substituted the Secretary of the Interior, Dirk Kempthorne, for the former Secretary, Gale Norton, as a defendant in this action.

² As a matter of convenience, and in accordance with both parties’ pleadings, the Court will at times throughout this Opinion refer to the plaintiff as “the Tribe.” See Complaint ¶ 1; Answer at 2 n.2. The Court notes, however, that the plaintiff’s status as a Native American tribe within the meaning of the federal acknowledgment criteria is the primary point of contention in this litigation. See Morton v. Mancari, 417 U.S. 535, 553 & n.24 (1974) (stating that for the purposes of federal recognition tribal status is a political rather than racial classification). Accordingly, the Court’s reference to the plaintiff as “the Tribe” is not intended to suggest that the plaintiff is, or should be, entitled to federal tribal recognition.

³ The named defendants are (1) Gale Norton, in her official capacity as the Secretary of the Interior (“Secretary”); (2) Aurene Martin, in her capacity as the Acting Assistant Secretary for Indian Affairs; and (3) the Department of the Interior (collectively “the defendants”). As noted supra, Dirk Kempthorne has been substituted for Gale Norton pursuant to Rule 25(d)(1). In addition, Aurene Martin is no longer the Acting Assistant Secretary for Indian Affairs, and the position is currently vacant.

grant federal recognition to Muwekma as a Native American tribe pursuant to the acknowledgment criteria of 25 C.F.R. § 83 (2006) ("Part 83"). Complaint ("Compl.") ¶ 1. Specifically, Muwekma contends, inter alia, that the Department violated the Equal Protection Clause and the APA by requiring it to undergo the Part 83 acknowledgment procedures while allowing similarly situated tribal petitioners to bypass these procedures altogether. Compl. ¶¶ 37-39; Points and Authorities in Support of Plaintiff's Motion for Summary Judgment ("Pl.'s Mem.") at 22-30. Currently before the Court are the parties' cross-motions for summary judgment.⁴ For the reasons set forth below, the Court denies both parties' motions without prejudice and directs the Department to supplement the administrative record.

I. Background

The following facts are not in dispute. Muwekma is a group of American Indians indigenous to the San Francisco Bay area, the members of which are direct descendants of the historical Mission San Jose Tribe, also known as the Pleasanton or Verona Band of Alameda County ("the Verona Band"). Pl.'s Mem. at 4; Defs.' Mem. at 5; Answer at 6. From 1914 to 1927, the Verona Band was recognized by the federal government as an Indian tribe. Pl.'s Mem. at 4-5; Defs.' Mem. at 5; Answer at 12-13. Neither Congress nor any executive agency ever formally withdrew federal recognition of the Verona Band. Pl.'s Mem. at 5; Answer at 14.

⁴ The following papers have been submitted in connection with these motions: (1) Points and Authorities in Support of Plaintiff's Motion for Summary Judgment ("Pl.'s Mem."); (2) Memorandum in Support of Defendants' Cross-Motion for Summary Judgment and Response in Opposition to Plaintiffs' Motion for Summary Judgment ("Defs.' Mem."); (3) Reply Brief in Support of Plaintiff's Motion for Summary Judgment and Opposing Defendants' Motion for Summary Judgment ("Pl.'s Opp."); (4) Reply Memorandum in Support of Defendants' Cross-Motion for Summary Judgment ("Defs.' Reply"); (5) Plaintiff's Notice of Supplemental Authority ("Pl.'s Not."); (6) Defendants' Response to Plaintiff's Filing of Supplemental Authority ("Defs.' Resp."); (7) Plaintiff's Second Notice of Supplemental Authority ("Pl.'s Second Not."); (8) Defendants' Response to Plaintiff's Second Notice of Supplemental Authority ("Defs.' Second Resp."); and (9) Plaintiff's Reply in Support of Second Notice of Supplemental Authority ("Pl.'s Reply to Second Resp.").

VJ e--ok

DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

Application Number 10298

Application for enrollment
with the Indians of the State of California under
the Act of May 18, 1928 (45 Stat. L. 602)

The Secretary of the Interior,
Washington, D. C.

Sir:

I hereby make application for the enrollment of myself (and minor children living on May 18, 1928) as Indians of the State of California in accordance with the provisions of the Act of Congress of May 18, 1928 (45 Stat. L. 602). The evidence of identity is herewith subjoined.

1. State the full names, ages, sex, and dates of birth of yourself and your minor children living on May 18, 1928.

<u>English Names</u>	<u>Relationship in Family</u>	<u>Ages in 1928</u>	<u>Sex</u>	<u>Dates of Birth Month Day Year</u>	<u>Degree of Indian Blood</u>
Marine, Lucas	Head	38	M	10-18-1900	1/2
" Ernest	Son	2	M	1-26-1926	3/4

Note:* See application of Katie Marine, wife, Centerville, Alameda County, California. App. No. 10675

2. Residence on May 18, 1928 Centerville, Alameda County, California.

3. Post Office Centerville Alameda California.
Town or City, Box Number or County State
Rural Route Number.

Note:* Does not live on Trust Lands.

4. Place of birth of yourself and each of your minor children
Near Sunol, Alameda County, California. My child was born
in Alameda County, California.

Application Number 10298
Name Marine, Lucas
Action taken
Approved, FAB

5. Where have you and your children resided since birth?
In Alameda and Mendocino Counties, California.

6. Are you married? Yes.

7. If a married woman, give your name before you were married.

8. Name and exact date of birth (Month, Day, and Year) of your wife (or husband).
Katie Marine, nee Peralta-- Age about 35 years.

9. Is he (or she) of Indian blood? If so, state the name of the Tribe or Band, and degree of Indian blood.
Yes 4/4 Ohlones, (Tribal name unknown)
Alameda County, California.

10. What is your degree of Indian blood and to what Tribe or Band of Indians of the State of California do you belong?
1/2 Degree of Indian Blood Ohlones (?) Tribal name Unknown, Alameda County, California.
Name of Tribe or Band

11. To what Treaty or Treaties were you or your ancestors a party, and where did you (or they) reside on June 1, 1852? Where and when were said Treaties negotiated?
I do not know.

12. Give the names of your California Indian ancestors living on June 1, 1852, through whom you claim, who were parties to any Treaty or Treaties with the United States. If you claim through more than one ancestor living on that date, set forth each claim separately. State your descent from said ancestor or ancestors setting forth your relationship to them.

<u>Names</u>	<u>Tribe or Band</u>	<u>Relationship by Blood</u>
Evalina Marine	Ohlones, Tribal name unknown.	Mother.
	Alameda County, California.	

(See Nos 15 and 26)

13. Give the names of the Chiefs, Captains and Headmen of the Tribe or Band to which your ancestors belonged on June 1, 1852, who executed the Treaty or Treaties herein referred to, if you know them.



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Washington, D.C. 20240



IN REPLY REFER TO:

Tribal Government Services - AR
WT 4641-MIB

MAY 24 1996

Ms. Rosemary Cambra
226 Airport Parkway, Suite 630
San Jose, California 95110

Dear Ms. Cambra:

The Branch of Acknowledgment and Research has reviewed documentation submitted by the Muwekma to demonstrate previous acknowledgment. The purpose of this research is to determine whether the Muwekma can utilize section 83.8 of the acknowledgment regulations by demonstrating previous Federal acknowledgment in the 20th century.

If a petitioner can demonstrate past acknowledgment, the requirements to be acknowledged are reduced, in accord with section 83.8(d). A previously acknowledged petitioner need only demonstrate tribal existence from the point of last Federal acknowledgment. Further, the demonstration of tribal existence between last acknowledgment and the present-day community requires only a demonstration of criterion 83.7(c), using a reduced burden of evidence. The petitioner must still show that modern-day group meets the full requirements of criteria 83.7(b) and (c). Tribal ancestry under criterion 83.7(e) must still be shown, tracing from the group at the point of last Federal acknowledgment or earlier.

A determination of previous acknowledgment has two general elements. One is to show a past Federal action which constitutes unambiguous Federal acknowledgment. The second is to establish on a preliminary basis that the present group is the same as or has evolved from the group as it existed at the point of last acknowledgment.

Based on the documentation provided, and the BIA's background study on Federal acknowledgment in California between 1887 and 1933, we have concluded on a preliminary basis that the Pleasanton or Verona Band of Alameda County was previously acknowledged between 1914 and 1927. The band was among the groups, identified as bands, under the jurisdiction of the Indian agency at Sacramento, California. The agency dealt with the Verona Band as a group and identified it as a distinct social and political entity. The band was among the bands proposed by a Special California Indian agent in 1914 for homesite land under the appropriations for homeless California Indians which began in 1906. In 1928, the band was again

identified under the land purchase program, but this review was that a homesite was not required.

The Muwekma have also established, on a preliminary basis, that it is the same group as the band identified between 1914 and 1927. Consequently, the Muwekma may complete their petition documentation based on section 83.8 of the regulations, tracing the group's existence from 1927 to the present.

This letter is a determination of eligibility to be evaluated under section 83.8, not a determination that the Muwekma meet the requirements of the acknowledgment regulations, section 83.7, as modified for previously acknowledged groups by section 83.8. That determination will be made during the active consideration of the Muwekma petition.

While we have endeavored to make this determination as conclusive as possible, you should be aware that a determination of the point of last Federal acknowledgment under 83.8 is subject to review during the preparation of the proposed finding, as well as to challenge and review in the final determination comment process and any reconsideration, in the same manner as any other question bearing on a determination concerning acknowledgment.

This letter constitutes only a portion of the results of the technical assistance review of the documented Muwekma petition. The technical assistance review will be conducted based on the this determination of previous acknowledgment. We expect to provide the balance of the review within a short time.

Sincerely,

/SGD/ DEBORAH J. MADDOX

Director, Office of Tribal Services

cc: Al Logan Slagle
Dena Magdaleno

Surname; 440B; 440 Chron; 400; Hold; Roth:gr; x3592; 5/6/96;
muwekprv.ltr; transmit 7; ret:jac 05-10-96



IN REPLY REFER TO:

United States Department of the Interior



BUREAU OF INDIAN AFFAIRS

Sacramento Area Office
2800 Cottage Way
Sacramento, California 95825

Ms. Dena Magdaleno
Post Office Box 56
Burnt Ranch, CA 95527

JAN 23 1998

Dear Ms. Magdeleno:

This is to acknowledge receipt of your letter dated December 16, 1997 and received in this office on December 22, 1997. Please accept our apologies for the delay in responding.

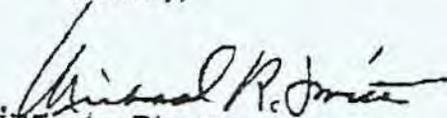
At your request, I am writing a letter of support for the Tsnungwe Council and the Muwekma Ohlone Tribe in their bid for Federal recognition. First let me state that the Bureau of Indian Affairs, Sacramento Area Office, is painfully conscious of the fact that California Indian tribes and their individual members have suffered numerous atrocities and inequities from the dominant culture through the hands of the United States Government and the State of California. To this day, those tribes who are fortunate to have Federal recognition status continue to suffer inequities in their share of Federal funds compared to funds received by similar tribes in other states. To that end, this office fully supports efforts by Indian groups such as the Tsnungwe Council and the Muwekma Ohlone Tribe in their bids for Federal recognition status.

Along with your request regarding the Tsnungwe Council, you provided a letter signed by the Acting Director, Office of Tribal Services, which acknowledged that you had established evidence that your ancestors were considered as parties to the 1864 Treaty. We concur with the Central Office of this finding and will support your bid for Federal recognition. I believe the Assistant Secretary - Indian Affairs has the administrative authority to reaffirm Federal status to your tribe.

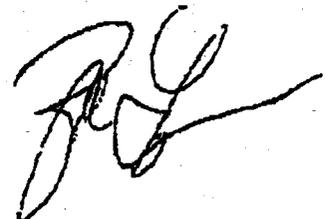
Although the Central Office has noted that the 1851 Treaty did not provide conclusive evidence that the treaty did not establish clear evidence of Federal recognition of your ancestors, I am fully supportive of your efforts to establish "unambiguous" Federal recognition of your ancestral group as a tribal entity.

The Bureau of Indian Affairs, Sacramento Area Office, is ready to assist the Tsnungwe Council and the Muwekma Ohlone Tribe in seeking administrative Federal recognition on the basis your tribes were never terminated.

Sincerely,


Acting Area Director

**Extension of Remarks
Representative Zoe Lofgren
July 25, 2002**



The Muwékma Ohlone Indian Tribe is a sovereign Indian Nation located within several counties in the San Francisco Bay Area since time immemorial.

In 1906, the Tribe was formally identified by the Special Indian Census conducted by Indian Agent C.E. Kelsey, as a result of the Congressional Appropriation Act mandate to identify and to purchase land for the landless and homeless California Indian tribes.

At this time, the Department of Interior and the Bureau of Indian Affairs federally acknowledged the Verona Band as coming under the jurisdiction of the Reno and Sacramento Agencies between 1906 and 1927.

The Congress of the United States also recognized the Verona Band pursuant to Chapter 14 of Title 25 of the United States Code, which was affirmed by the United States Court of Claims in the Case of Indians of California v. United States (1942) 98 Ct. Cl.583.

The Court of Claims case judgment instructed the identification of the Indians of California with the creation of Indian rolls. The direct ancestors of the present-day Muwékma Ohlone Tribe participated in and enrolled under the 1928 California Indian Jurisdictional Act and the ensuing Claims Settlement of 1944 with the Secretary of the Interior approving all of their enrollment applications.

Meanwhile, as a result of inconsistent federal policies of neglect toward the California Indians, the government breached the trust responsibility relationship with the Muwékma tribe and left the Tribe landless and without either services or benefits. As a result, the Tribe has suffered losses and displacement. Despite these hardships the Tribe has never relinquished their Indian tribal status and their status was never terminated.

In 1984, in an attempt to have the federal government acknowledge the status of the Tribe, the Muwékma Ohlone people formally organized a tribal council in conformance with the guidelines under the Indian Reorganization Act of 1934.

In 1989, the Muwékma Ohlone Tribal leadership submitted a resolution to the Bureau of Indian Affairs Branch of Acknowledgement and Research with the intent to petition for Federal acknowledgement. This application is known as Petition #111. This federal process is known to take many years to complete.

Simultaneously, in the 1980's and 1990's, the United States Congress recognized the federal governments neglect of the California Indians and directed a Commission to study the history and current status of the California Indians and to deliver a report with recommendations. In the late 1990's the Congressional mandated report - the California

Advisory Report, recommended that the Muwekma Ohlone Tribe be reaffirmed to its status as a federally recognized tribe along with five other Tribes, the Dunlap Band of Mono Indians, the Lower Lake Koi Tribe, the Tsungwe Council, the Southern Sierra Miwuk Nation, and the Tolowa Nation.

On May 24, 1996, the Bureau of Indian Affairs pursuant to the regulatory process then issued a letter to the Muwekma Ohlone Tribe concluding that the Tribe was indeed a Federally Recognized Tribe.

In an effort to reaffirm their status and compel a timely decision by the Department of the Interior, the Muwekma Ohlone Tribe sued the Bureau of Indian Affairs. The Court has mandated that the Department issue a decision this year. That decision is expected in early August.

Specifically, on July 28, 2000, and again on June 11, 2002, Judge Ricardo Urbina wrote in his Introduction of his Memorandum Opinion Granting the Plaintiff's Motion to Amend the Court's Order (July 28, 2002) and Memorandum Order Denying the Defendant's to Alter or Amend the Court's Orders (June 11, 2002) affirmatively stating that:

"The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Century, the Department of the Interior ("DOI") recognized the Muwekma tribe as an Indian tribe under the jurisdiction of the United States." (Civil Case No. 99-32671 RMU D.D.C.)

I proudly support the long struggle of the Muwekma Ohlone Tribe as they continue to seek justice and to finally, and without further delay, achieve their goal of their reaffirmation of their tribal status by the federal government. This process has dragged on long enough. I hope that the Bureau of Indian Affairs and the Department of Interior will do the right thing and act positively to grant the Muwekma Ohlone Tribe their rights as a Federally Recognized Indian Tribe. The Muwekma Ohlone Tribe has waited long enough; let them get on with their lives as they seek to improve the lives of the members of this proud tribe. To do anything else is to deny this Tribe Justice. They have waited patiently and should not have to wait any longer.



CRUZ M. BUSTAMANTE
Lieutenant Governor
State of California

August 29, 2002

The Honorable Neal McCaleb
Assistant Secretary-Indian Affairs
United States Department of the Interior
1849 C Street, N.W.
Washington, D.C. 20240

Dear Secretary McCaleb:

I write to urge you to support Petition #111 by the Muwekma Ohlone Tribe for reaffirmation of Federal Acknowledgement.

The Muwekma Ohlone Tribe meets all of the criteria for reaffirmation set by the court as well as the Bureau of Indian Affairs' acknowledgement criteria. The tribe is a previously recognized tribe. It has demonstrated that it has had a trust relationship with the United States from 1906 to the present and Congress has never terminated their relationship.

The tribe's members descend from an historical Indian tribe and they are not members of any other Federally-recognized tribe.

After compiling data and completing extensive research, the Muwekmas have presented a compelling case for the tribe's Federal Acknowledgement. I respectfully urge you and the Bureau of Indian Affairs to carefully review their Petition.

Sincerely,

A handwritten signature in cursive script that reads "Cruz M. Bustamante".

CRUZ M. BUSTAMANTE
Lieutenant Governor

cc: The Honorable Aurene Martin, Deputy Assistant Secretary-Indian Affairs

CMB:BM/mb082902

Karla Cuero

From: Charlene Nijmeh <c_nijmeh@yahoo.com>
Sent: Sunday, May 20, 2018 4:28 PM
To: Karla Cuero
Cc: Alan Leventhal; Monica V. Arellano; Rosemary Cambra; Norma Sanchez; Rosemary Cambra
Subject: EBRPD Coyote Hills Restoration and Public Access Project
Attachments: EBRPD Coyote Hills Restoration Project EIR Response.docx; Previous Recognition 5-24-96-1.pdf; BIA Smith Letter 1998.pdf; DC District Court Muwekma.pdf; Federal Court Opinion Muwekma.pdf; Lofgren Extension of Remarks.pdf; Lt. Governor Letter 2002.pdf; Muwekma Elder Lucas Marine 1928 BIA.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Karla

As Chairwoman of the Muwekma Ohlone Tribe I am reaching out to thank you for notifying the Tribal leadership about the proposed Coyote Hills Restoration and Public Access Project on East Bay Regional Park District Lands adjacent to Coyote Hills in Alameda County. Please let me know if any coordination is needed on our part. Please see attached documents for you review.

Thank you again.

Charlene Nijmeh
Chairwoman
MUWEKMA OHLONE TRIBE OF THE SF BAY AREA

From: [JONATHAN BIGGS](#)
To: [Karla Cuero](#)
Cc: [kwallace@fremont.k12.ca.us](#); [jchwastyk@fremont.k12.ca.us](#); [clemos@fremont.k12.ca.us](#)
Subject: Coyote Hills EIR May 31, 2018 scoping session. Per CBE Regulations: No Schools should be built on Land Subject to Liquefaction
Date: Thursday, May 31, 2018 10:45:43 AM

May 31, 2018

To: Karla Cuero, East Bay Regional Parks District, 2950 Peralta Oaks Court, Oakland, CA 94605, 510-544-2622

Kcuero@ebparks.org

RE: Coyote Hills Regional Park EIR Scoping Session, May 31, 2018, 6:30 PM, at the East Bay Regional Park District's Board Room, 2950 Peralta Oaks Court, Oakland, CA 94605

Copy: Dr. Kim Wallace, Superintendent, Fremont Unified School District,
KWallace@fremont.k12.ca.us , 510-659-2597

John Chwastyk, Director of Facilities and Construction, FUSD,
JChwastyk@fremont.k12.ca.us , 510-659-2559 X 12-445

Carol Lemos, Secretary of Facilities and Construction, FUSD,
CLemos@fremont.k12.ca.us , 510-659-2559 X 12-443

Dear Ms. Cuero,

As East Bay Regional Parks proceeds with the Coyote Hills - Restoration and Access Site Plan projects and EIR process, please take note of the following regulation set forth by the California Board of Education, with regards to selection of sites for California Public Schools

<https://www.cde.ca.gov/ls/fa/sf/title5regs.asp>

Title 5, California Code of Regulations

Division 1, Chapter 13, Subchapter 1

School Facilities Construction

Article 2. School Sites

- **14010. Standards for School Site Selection.**

“i. The site is not subject to moderate to high liquefaction or landslides.”

The school site location shown on the [Coyote Hills - Restoration and Access Site Plan Attachment 3.pdf](#), is land subject to **moderate** liquefaction per USGS Maps. **So therefore no public school should be built at the proposed school site location.**

<https://geomaps.wr.usgs.gov/sfgeo/liquefaction/susceptibility.html>

Please notify and include representatives from the Fremont Unified School District in the EIR process.

Thank you for your consideration in this matter.

Mary Biggs

Fremont Homeowner and FUSD Parent

J.Biggs@comcast.net

510-299-5171 cell

Attachment(s) | [View attachments on the web](#)

2 of 2 File(s)



Coyote Hills - Restoration and Access Site Plan_Attachment 3.pdf



NOP - with attachments.pdf

[VISIT YOUR GROUP](#)

Coyote Hills Restoration and Public Access Project

Public Scoping Meeting May 31, 2018 for EIR

Summary of Oral Comments:

- Consider alternatives to the preferred conceptual plan, including different placement of trails, parking area located south of Patterson Ranch Road
- Be transparent about possibility that “human remains” may be disturbed by project
- Consider improving the exhibit on Native Americans in the Coyote Hills Visitor Center as a mitigation measure
- Need to evaluate impacts of project trails on habitat fragmentation
- Need access on project site for mosquito abatement; consider access routes and vegetation management

COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

CEQA –NOP Meeting 5-31-2018- Comment Card

Please write your comments regarding topical areas that should be addressed in the CEQA document below:
Be specific when possible (i.e. address potential trail impacts on endangered species)

Cultural Resources – especially Human Remains that have been disturbed as recent as April 2007 and as far back as the 1960's and 1970's

a point of MITIGATION perhaps provide funding for upgrading of The Ohlone Indian exhibits in the Coyote Hills Visitors Center could be provided?

Optional:

Name:

ANDREW GARCIA

Email or Phone:

chochenya@aol.com

Please note that comments and information submitted become part of the public record.

Please turn in this card to a team member at the end of the meeting, or if turning in after the meeting, please mail to:
Karla Cuero, Project Coordinator 2950 Peralta Oaks Ct. Oakland, CA 94605 or email: kcuerdo@ebparks.org.

Last day to submit a comment is June 18, 2018

Thank you for participating in the Coyote Hills Restoration and Public Access planning process!

Karla Cuero

From: Carin High <howardhigh1@comcast.net>
Sent: Thursday, May 31, 2018 10:55 AM
To: JONATHAN BIGGS
Cc: Karla Cuero; kwallace@fremont.k12.ca.us; jchwastyk@fremont.k12.ca.us; clemos@fremont.k12.ca.us
Subject: Re: Coyote Hills EIR May 31, 2018 scoping session. Per CBE Regulations: No Schools should be built on Land Subject to Liquefaction

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Mary,

The issue of the school site and City of Fremont park site are not part of the EIR and not the responsibility of EBRPD. They have no control over those issues. The parking lot proposed is not immediately adjacent to Patterson Slough, but certainly the info you provided could have pertinence for wildlife and surrounding habitat.

Thanks!
Carin

Sent from my iPhone

On May 31, 2018, at 10:45 AM, JONATHAN BIGGS <j.biggs@comcast.net> wrote:

May 31, 2018

To: Karla Cuero, East Bay Regional Parks District, 2950 Peralta Oaks Court, Oakland, CA 94605, 510-544-2622

Kcuero@ebparks.org

RE: Coyote Hills Regional Park EIR Scoping Session, May 31, 2018, 6:30 PM, at the East Bay Regional Park District's Board Room, 2950 Peralta Oaks Court, Oakland, CA 94605

Copy: Dr. Kim Wallace, Superintendent, Fremont Unified School District, KWallace@fremont.k12.ca.us, 510-659-2597

John Chwastyk, Director of Facilities and Construction, FUSD, JChwastyk@fremont.k12.ca.us, 510-659-2559 X 12-445

Carol Lemos, Secretary of Facilities and Construction, FUSD, CLemos@fremont.k12.ca.us, 510-659-2559 X 12-443

Dear Ms. Cuero,

As East Bay Regional Parks proceeds with the Coyote Hills - Restoration and Access Site Plan projects and EIR process, please take note of the following regulation set forth by the California Board of Education, with regards to selection of sites for California Public Schools

<https://www.cde.ca.gov/ls/fa/sf/title5regs.asp>

Title 5, California Code of Regulations

Division 1, Chapter 13, Subchapter 1

School Facilities Construction

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<https://geomaps.wr.usgs.gov/sfgeo/liquefaction/susceptibility.html>

Please notify and include representatives from the Fremont Unified School District in the EIR process.

Thank you for your consideration in this matter.

Mary Biggs

Fremont Homeowner and FUSD Parent

J.Biggs@comcast.net

510-299-5171 cell

Attachment(s) | [View attachments on the web](#)

2 of 2 File(s)



Coyote Hills - Restoration and Access Site Plan_Attachment 3.pdf



NOP - with attachments.pdf

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COYOTE HILLS RESTORATION AND PUBLIC ACCESS PROJECT

CEQA -NOP Meeting 5-31-2018- Comment Card

Please write your comments regarding topical areas that should be addressed in the CEQA document below:
Be specific when possible (i.e. address potential trail impacts on endangered species)

Alameda County Mosquito Abatement →
1) Access - Vehicle / Equipment
2) Open lower canopy
3) Long term management of Lower canopy vegetation -
poison oak, black berry, willow shoots, for project area
as well as adjacent areas.

Optional:

Name: Joseph Huston

Email or Phone: Joseph@mosquitoes.org
510 783-7744

Please note that comments and information submitted become part of the public record.

Please turn in this card to a team member at the end of the meeting, or if turning in after the meeting, please mail to:
Karla Cuero, Project Coordinator 2950 Peralta Oaks Ct. Oakland, CA 94605 or email: kcuero@ebparks.org.

Last day to submit a comment is June 18, 2018

Thank you for participating in the Coyote Hills Restoration and Public Access planning process!

Karla Cuero

From: Underwood, Jared <jared_underwood@fws.gov>
Sent: Friday, June 08, 2018 4:05 PM
To: Karla Cuero
Subject: Re: [EXTERNAL] Notice of Preparation and Scoping Session - Coyote Hills Restoration and Public Access Project

Hi Karla,

Thanks for including your neighbor in the process. We look forward to reviewing the documents.

Thanks,

Jared

Jared Underwood, Ph.D.
Refuge Manager
Don Edwards San Francisco Bay National Wildlife Refuge
1 Marshlands Road
Fremont CA 94555
office (510) 792-0222 Ext 125
cell (510) 453-6695

On Tue, May 15, 2018 at 3:12 PM, Karla Cuero <kcuero@ebparks.org> wrote:

Hello – attached please find the Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the Coyote Hills Restoration and Public Access Project.

The scoping session will be held on **Thursday, May 31, 2018 at 6:30PM at the District's Board Room – 2950 Peralta Oaks Ct., Oakland, CA 94605.**

Thanks so much,

Karla



Karla Cuero
Project Coordinator | Environmental Programs
East Bay Regional Park District
2950 Peralta Oaks Court, Oakland, CA 94605
T: 510-544-2622
kcuero@ebparks.org | www.ebparks.org

Karla Cuero

From: C/H High <howardhigh1@comcast.net>
Sent: Friday, June 15, 2018 3:26 PM
To: Chris Barton; Karla Cuero
Subject: Fwd: Coyote Hills Restoration Plan

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Chris,

I don't know if Karla is in the office and scoping comments are due Monday, June 18th. I would like answers to my questions below to help inform the scoping comments we submit. So if you cannot answer the questions, would it be possible to obtain an extension until I can receive the answers?

In addition to the comments below, I forgot to ask if there were any conditions that went with the land when the land was donated to EBRPD regarding continuation of agriculture? For example, is there a specified acreage or location? We are not opposed to agriculture in the area and have supported it, I just want to fully understand the constraints that run with the land.

I would be extremely grateful for any information you can provide.

Regards,

Carin High

CCCR/OAS/FCHF

----- Forwarded Message -----

Subject:Coyote Hills Restoration Plan
Date:Thu, 14 Jun 2018 15:58:27 -0700
From:C/H High <howardhigh1@comcast.net>
To:Karla Cuero <kcuerdo@ebparks.org>

Hi Karla,

I hope you are well!

I am writing to see if you have information that can help with scoping comments. Based upon very rough measurements, looking at the scale provided on the preferred concept plan, it appears the proposed parking lot is roughly an acre and a half in size. Is this correct?

Also, where can I find more information on the proposed picnic area - size, number of picnic facilities (e.g. tables, etc.) are there going to be BBQ pits?

It's also difficult to tell from the mapping provided - how far are the

parking lot and picnic facilities from Patterson Slough?

Any information you can provide would be greatly appreciated!

Thanks,

Carin High
CCCR/OAS

Karla Cuero

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Any information you can provide would be greatly appreciated!

Thanks,

Carin High
CCCR/OAS



Daniel Woldesenbet, Ph.D., P.E., Director

399 Elmhurst Street • Hayward, CA 94544 • (510) 670-5480 • www.acgov.org/pwa

June 15, 2018

MS Karla Cuero
East Bay Regional Park District
2950 Peralta Court
Oakland Ca 94601
kcuro@ebparks.org

RE: Notice of Preparation (NOP) EIR – Coyote Hills Restoration and Public access Project

Dear Ms. Cuero,

The Alameda Flood Control and Water Conservation District (District) reviewed the NOP of proposed restoration of a 306-acre parcel west of Paseo Padre Boulevard, easterly and contiguous to the Coyote Hill Park in the City of Fremont, California.

The southerly portions of the 306-acre property includes a 58-acre parcel. This parcel to the south and contiguous to the Line P channel is designated as mitigation site for District maintenance activity impacts under a settlement agreement that culminated in District improving the Line P (Ardenwood Creek) from Tupelo Road upstream to about 2,600-feet downstream of Paseo Padre Parkway.

During the public meeting on May 31, 2018, it was discussed that several pedestrian crossings of District flood control channels involving installation of bridges are proposed.

The District recommends the following be evaluated in the EIR:

- Discussion of the 58-acre mitigation site;
- Discussion of the proposed bridge crossing locations and potential effects on maintenance access of the channels; and
- District future improvements along the Line P channel downstream of the recent restoration project and adjacent District properties.

Thank you for the opportunity to comment on the NOP. Please include the District in your circulation of the draft EIR. If you have any question, please contact me.

Yours truly,

A handwritten signature in blue ink, appearing to read "Kwablah Attiogbe".

Kwablah Attiogbe
Supervisor Environmental Services.

Karla Cuero

From: C/H High <howardhigh1@comcast.net>
Sent: Monday, June 18, 2018 1:48 PM
To: Karla Cuero
Subject: Re: Coyote Hills Restoration Plan

Hi Karla,

Thank you, I do intend to submit comments today. It just might not be by 5 pm as I am waiting for a couple of signatures and I have something that came up unexpectedly requiring me to step out for a few hours. Thank you however for the possibility of a few extra days.

Regards,

Carin

On 6/18/2018 1:33 PM, Karla Cuero wrote:

Hi Carin – I hope you had a great weekend!

We will make sure to cover the questions you had in our analysis for the EIR. Hopefully those questions will be addressed in the document, but please also feel free to comment during the 45-day EIR comment period.

As for this scoping period, we will certainly include the questions you had as part of your comments (if you'd like), and if you have any additional questions or comments, we will accept them over the next couple of days.

Thanks so much Carin.

-Karla



Karla Cuero
Project Coordinator | Environmental Programs
East Bay Regional Park District
2950 Peralta Oaks Court, Oakland, CA 94605
T: 510-544-2622
kcuerdo@ebparks.org | www.ebparks.org

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From: C/H High [<mailto:howardhigh1@comcast.net>]
Sent: Friday, June 15, 2018 4:04 PM

To: Karla Cuero <kcuerdo@ebparks.org>; Chris Barton <cbarton@ebparks.org>
Subject: Re: Coyote Hills Restoration Plan

Thanks Karla,

Have a wonderful weekend.

Carin

On 6/15/2018 3:32 PM, Karla Cuero wrote:

Hi Carin – I meant to email you earlier today. We were planning to address the questions you had in the Project Description.

Chris is out today, but I will check Monday morning if we can do an extension. Thanks so much Carin.



Karla Cuero
Project Coordinator | Environmental Programs
East Bay Regional Park District
2950 Peralta Oaks Court, Oakland, CA 94605
T: 510-544-2622
kcuerdo@ebparks.org | www.ebparks.org

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 Please consider the environment before you print

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Also, where can I find more information on the proposed picnic area - size, number of picnic facilities (e.g. tables, etc.) are there going to be BBQ pits?

It's also difficult to tell from the mapping provided - how far are the parking lot and picnic facilities from Patterson Slough?

Any information you can provide would be greatly appreciated!

Thanks,

Carin High
CCCR/OAS

Karla Cuero

From: Michelle Myers <Michelle.Myers@acwd.com>
Sent: Monday, June 18, 2018 3:22 PM
To: Karla Cuero
Subject: ACWD Comments - Notice of Preparation of an Environmental Impact Report for the Coyote Hills Restoration and Public Access Project
Attachments: Coyote Hills Restoration and Public Access NOP EIR ACWD Comments 06-18-2....pdf

Dear Ms. Cuero,

Thank you for the opportunity to comment on the subject Project. Attached is a PDF of ACWD's comment letter, which will go in the mail to you today. If you have any questions, please contact me at the number below.

Thank you,

Michelle A. Myers
Groundwater Resources Manager

Alameda County Water District
43885 South Grimmer Boulevard
Fremont, CA 94538

Phone: (510) 668-4454

Fax: (510) 651-1760

E-mail: michelle.myers@acwd.com





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June 18, 2018

Karla Cuero
Environmental Programs Project Coordinator
East Bay Regional Park District
2950 Peralta Oaks Court
Oakland, CA 94605

Dear Ms. Cuero:

Subject: Notice of Preparation of an Environmental Impact Report for the Coyote Hills Restoration and Public Access Project

The Alameda County Water District (ACWD) wishes to thank you for the opportunity to comment on the Notice of Preparation of an Environmental Impact Report (EIR) for the Coyote Hills Restoration and Public Access Project (Project).

ACWD has reviewed the Notice of Preparation and would appreciate your consideration of the following comments while developing the EIR:

1. Groundwater: A major portion of ACWD's water supply is obtained from the Niles Cone Groundwater Basin that approximately coincides with ACWD's boundaries and extends west under the San Francisco Bay. Therefore, it is imperative that ACWD protects the water quality and ensures the continued use of the groundwater basin for water supply for ACWD's customers.
 - a. Groundwater Well Protection/Destruction: In order to protect the groundwater basin, ACWD regulates the construction, repair, and destruction of wells, exploratory holes, and other excavations located within the City of Fremont under ACWD Ordinance No. 2010-01. Therefore, each well located within the Project area must be either protected or properly destroyed prior to construction activities. If the wells are to remain, a letter so indicating must be sent to ACWD. If a well is damaged or the surface seal is jeopardized in any way during construction activities, the wells must be destroyed in compliance with ACWD Ordinance No. 2010-01.

ACWD records indicate the existence of at least eight (8) abandoned wells located within the Project area. Any abandoned wells located within the Project area (including areas designated as open space) must be properly destroyed prior to grading and/or construction activities. Since most of the wells have not been located, ACWD requests that the EIR include the provision that Project proponents coordinate with ACWD so that: a) ACWD can assist in identifying abandoned wells, and b) any wells identified or discovered during construction are properly destroyed in accordance to ACWD specifications.

- b. Drilling Permit Requirement: As required by ACWD's Well Ordinance No. 2010-01, drilling permits are required prior to the start of any subsurface drilling activities for wells, exploratory holes, and other excavations (including the installation of piles or piers for bridges that interconnect aquifers or water-bearing zones). Application for a permit may be obtained from ACWD's Engineering Department, at 43885 South Grimmer Boulevard, Fremont or online at <http://www.acwd.org>. Before a permit is issued, the applicant is required to deposit with ACWD, cash or check in a sufficient sum to cover the fee for issuance of the permit or charges for field investigation and inspection. All permitted work requires scheduling for inspection; therefore, all drilling activities must be coordinated with ACWD prior to the start of any field work.
2. Access to ACWD Facilities: ACWD currently uses the Alameda County Regional Trail and Patterson Ranch Road to access a number of our facilities, including monitoring wells located west of the Project area. The information collected from the monitoring wells is used in the management of ACWD's groundwater resources; therefore, ACWD requests that the EIR address maintaining access to ACWD's facilities.
 3. ACWD Contacts: The following ACWD contacts are provided so that the East Bay Regional Park District can coordinate with ACWD as needed during the CEQA process:
 - Michelle Myers, Groundwater Resources Manager, at (510) 668-4454 or by email at michelle.myers@acwd.com, for coordination regarding ACWD's groundwater resources.
 - Kit Soo, Well Ordinance Supervisor, at (510) 668-4455 or by email at kit.soo@acwd.com, for coordination regarding groundwater wells and drilling permits.
 - Juni Rotter, Development Services Supervisor, at (510) 668-4472 or by email at juniet.rotter@acwd.com, for coordination regarding public water systems and water services.

Thank you for the opportunity to comment on the Project at this time.

Sincerely,



Steven D. Inn
Manager of Water Resources

mam/mh
By email

cc: Michelle Myers, ACWD
Kit Soo, ACWD
Juni Rotter, ACWD

From: [CCCR](#)
To: [Karla Cuero](#)
Subject: Scoping comments regarding the proposed Coyote Hill Regional Park Restoration and Public Access Plan
Date: Monday, June 18, 2018 4:36:10 PM
Attachments: [Group scoping comments re Coyote Hills Restoration and Public Access Project NOP.pdf](#)

Dear Karla,

Please find attached comments submitted on behalf of the Citizens Committee to Complete the Refuge, Friends of Coyote Hills and Ohlone Audubon Society.

We would appreciate acknowledgment of receipt of our comment letter at your convenience.

Regards,
Carin High
CCCR/FCH/OAS



Karla Cuero, Environmental Programs Project Coordinator
East Bay Regional Park District
2950 Peralta Oaks Court, Oakland, CA
94605

18 June 2018

Re: Coyote Hills Restoration and Public Access Project Notice of Preparation (NOP)

Dear Ms. Cuero,

The Citizens Committee to Complete the Refuge (CCCR), Friends of Coyote Hills (FCH) and Ohlone Audubon Society (OAS) thank you for the opportunity to provide scoping comments for the proposed Coyote Hills Restoration and Public Access Project. Let us begin by commending East Bay Regional Park District for its recognition of the importance of the natural resource values of these lands as demonstrated by the emphasis of the preferred concept plan on the creation of "natural units." While we are encouraged by elements of the proposed plan, we still firmly believe to adequately protect the resources of Coyote Hills Regional Park and the areas proposed for restoration, additional changes are necessary.

Members of CCCR, FCHF and OAS fought for decades, and expended much time and energy, to protect the Patterson Ranch lands west of Ardenwood Boulevard from the adverse impacts of development not only to protect the extraordinary natural resources of Coyote Hills Regional Park, but also to preserve the tremendous restoration potential of the 296 acres of lands that were ultimately donated to the Park District. These efforts complimented a vision for the area long held by the scientific and environmental community.

One of the significant goals of protecting these lands was the restoration of the historic willow grove, remnants of which still survive, that once ran from Patterson Slough to Ardenwood Historic Farm. While such an extensive restoration is no longer possible due to development surrounding the parklands, a significant opportunity still exists to restore the historic willow grove in the area between Patterson Slough and the existing kiosk. This would enhance and increase in acreage this habitat that is extremely rare in the South Bay and that provides shelter and foraging, roosting and nesting habitat for migratory and resident song birds. This is consistent with and supported by language within the 2005 Coyote Hills Regional Park Land Use Plan (LUP). The LUP identifies the Willow Marsh (remnant willow grove) as an area of significant resource value. Also the willow woodland "has the greatest diversity of bird species within the park" and "it is the park's best bird habitat."

The Baylands Ecosystem Habitat Goals Report 1999¹ "Segment R – Coyote Hills Area" states:

...The marshes encircled Coyote Hills except to the east where moist grassland bounded the upper margin of the marsh. These grasslands were characterized by springs and seeps, willow groves, seasonal ponds...

¹ Goals Project. 1999. Baylands Ecosystem Habitat Goals. A report of habitat recommendations prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. U.S. Environmental Protection Agency, San Francisco, Calif./S.F. Bay Regional Water Quality Control Board, Oakland, Calif.

...The diked baylands east of Coyote Hills support *the largest remaining willow grove in the baylands ecosystem*, seasonal and diked wetlands, and a permanent freshwater pond. [emphasis added]

Under “Unique Restoration Opportunities” the report states, “...On the eastern side of Coyote Hills, there are seasonal wetlands and willow grove habitat that could be restored or enhanced.” These recommendations have been reiterated in the 2016 update. Fragments of this historic willow grove exist at the eastern boundary of Coyote Hills Regional Park and on the Patterson Ranch site. The current alignment of Patterson Slough represents the approximate northeastern boundary of the historic willow grove. Historically the willow grove tapered to the east all the way to Ardenwood Historic Farm. Willow grove habitat supports a tremendous diversity of wildlife species. The 2005 Coyote Hills Land Use Plan states the willow habitat within the Park boundaries supplies an abundant supply of insects that provide a food base nearly 100 species of wintering, migratory and breeding birds.

Project Description:

The Coyote Hills Restoration and Public Access Project does not appear to include active restoration. At the public meetings 11 landscape units were identified for the purposes of illuminating three project alternatives.

- Are restoration elements envisioned in the Restoration and Public Access Plan? How does EBRPD define restoration relative to this project? Does EBRPD simply intend to preserve the land or are enhancement and restoration activities proposed? There is no description of the manner in which the acquired lands will be enhanced or restored. No information has been provided to describe how the restoration will be implemented and the amount of financial resources to be devoted to enhancing and restoring these lands.
- Please fully describe the restoration elements in the project description of the DEIR. The DEIR must provide details of any proposed habitat restoration. Will earth work be involved? Will plantings occur? What species of plants? What is the source material for any planting material? Will monitoring of plantings or habitat restoration occur?

It is difficult to assess the impacts of public access on the existing and proposed habitat restoration without more information describing these activities. This background information on the importance and unique restoration potential of the willow groves informs the comments that follow.

Preferred concept plan and consideration of alternatives:

- It is difficult to assess the spatial relationship between proposed project elements and known landmarks therefore we request that the potential elements of the proposed project be depicted on an aerial photo for the preferred alternative and for each alternative analyzed.
- Please indicate the distance to sensitive habitats for facilities proposed under any of the alternatives considered.
- The Draft Environmental Impact Report (DEIR) should provide an explanation for the siting of the proposed 98-parking space parking lot and restroom. For example, the 2005 Coyote Hills Regional Park Land Use Plan (LUP) discusses the need for overflow parking for big events of the year. One such overflow area is a seasonal wetland site in the Willow Run Area. The LUP states, “The Willow Run lot holds two times as many cars, but is more than twice as far and requires a large staff to direct traffic and parking and to run shuttle buses between the lot and Visitor Center.” What is the purpose and value of locating a permanent parking lot in this area?
- Figure 3 of the NOP, “Draft Parking Concept” includes the phrase “open use area.” What is an “open use area” and how does that differ from the proposed “picnic area?”
- Please provide landscaping details for the parking area and any of the proposed facilities.
- The DEIR should provide details regarding the proposed picnic area including the dimensions of the picnic facilities, number of picnic sites, whether these sites would include grills, any other amenities that are being considered as part of the picnic area, any proposed landscaping or lighting, and distance to sensitive habitats.

Parking and picnic areas should be moved south of Patterson Ranch Road:

We urge the EBRPD to provide an alternative that locates the proposed 98-space parking lot and proposed picnic area south of Patterson Ranch Road and away from the sensitive willow grove habitat. Such an alternative was depicted on slide 40 of the August 14, 2017 Powerpoint presentation from public workshop #1 (attached).

There are several benefits to such an alternative. The first and of most concern to our organizations, is that it would move intensive human activity away from sensitive habitats such as the willow/riparian habitat along Patterson Slough and the area proposed for restoration of the historic willow grove.

According to Figure 2 "Draft Conceptual Site Plan (Preferred Option), it appears that the proposed picnic area is immediately adjacent to Patterson Slough willow/riparian habitat and the proposed parking lot is within 500 feet of the willow/riparian habitat. The DEIR must identify the impacts of locating these facilities within proximity to this sensitive habitat.

- The DEIR must identify and analyze the impacts of locating these facilities within proximity to this sensitive habitat. Impacts that should be included in this discussion are human disturbance, noise, attraction of nuisance species, maintenance activities required to maintain the facilities, impacts of dogs, etc.

The LUP has identified existing "Willow Marsh" habitat as a "Special Protection Feature." "Special Protection Features" are defined as "unique or fragile natural, cultural, aesthetic or educational features that need the greatest amount of protection or require specialized types of management." As was mentioned previously, the LUP identifies the importance of the Willow Marsh to wintering, migratory and breeding birds and that it is the best habitat for birds within the park.

Scientific literature is rife with documentation of the adverse impacts of human disturbance on bird behavior, nesting, the survivorship of nestlings, etc. Piper and Catterall 2005² conducted a study to assess whether picnic areas had impacts on birds in adjacent eucalypt forests in Australia. They concluded that "picnic areas exert strong localized edge effects on forest bird assemblages, and are likely to cause reduced reproductive success for small-bodied forest bird species which attempt to nest nearby."

Parking and picnic facilities located south of Patterson Ranch Road could be designed to embrace the agricultural history of the land and provide easy access should a farm stand become part of the operation. Short-term parking stalls could be designated for those who only wish to patronize the farm stand. Access to the parking and picnic areas could be separated from access needed for the agricultural operation to avoid disruption of either activity.

Fragmentation of habitat by proposed trails:

The title of the NOP refers to "Restoration" however the preferred plan is riddled with trails right up to the edge of, and into habitats identified by the LUP as "sensitive" habitats. The Patterson Slough East Spur, Patterson Slough West Spur and the Wetlands View Spur must be removed. A number of the proposed new trails are labeled as "multi-use trails." These multi-use trails lead right up to, or are adjacent to, or completely encircle sensitive habitats.

² Piper, Scott D. and Carla P. Catterall. 2006. *Impacts of picnic areas on bird assemblages and nest predation activity within Australian eucalypt forests*. *Landscape and Urban Planning* 78: 251-262.

Miller, Knight and Miller 1998³ found that “trails affect the distribution and abundance as well as the reproductive success of bird species, suggesting the need for more insightful trail planning and management of recreationists in natural areas.” Jordan 2000⁴ summarized studies of human disturbance on breeding birds:

“Several references document negative impacts on breeding birds of recreational trails as narrow as 1-3m wide in forest and grasslands (Miller et al. 1998, Hickman 1990), as well as by dirt roads and powerlines (Kroodsma 1982, Askins 1994). The negative impacts included decreased nesting near trails, altered bird species composition near trails, and increased nests predation by cowbirds, skunks, raccoons and foxes using the clearings as corridors. These effects are possible even if the forest canopy is not opened by the trail (Hickman 1990).”

Fletcher, McKinney and Bock 1999⁵ reported, “Our study suggests both that riparian corridors are important areas for wintering raptors and that trails may displace raptor perch use away from riparian habitat.”

Trulio and White⁶ undertook an experimental approach to investigate wintering waterfowl responses to introduced trail use at foraging sites with and without recreational trails along the salt pond habitats of the San Francisco Bay. Waterfowl were exposed to trail use in the form of two researchers walking levees adjacent to ponded habitat, and the number of waterfowl by species were compared before and after experimental walks in 40-m bands starting at the levee and extending 200 m into the ponds. The researchers recorded distances to the nearest individuals, responses of focal animals, and numbers of recreational trail users. The most numerous species were Ruddy Duck (*Oxyura jamaicensis*), Northern Shoveler (*Anas clypeata*), and scaup spp. (*Aythya affinis* and *A. marila*). Recreational trail use rates at trail sites averaged 1 to 82 people/hr. The greatest difference in numbers of birds before vs. after experimental walks occurred in the two 40-m bands closest to the levee at non-trail sites. The relationship between the ratio of before to after-walk waterfowl numbers vs. date since the start of the winter season and the total number of birds vs. the number of recreational trail users did not indicate increasing tolerance to trail use for waterfowl overall. However, species varied in their tolerances. Distances (using the 95th percentile) that individual birds were recorded from researchers during experimental walks varied from approximately 170-200 m at both non-trail and trail sites. These study results have direct implication for the trails proposed around and into the mitigation ponds proposed by the Alameda County Public Works Flood Control Area (Landscape Unit #11).

These studies confirm the impacts of recreational trail use on bird behavior and breeding success. Other studies have indicated recreational trail use may alter species diversity and composition in areas adjacent to trails.

- Based upon this information we urge EBRPD to consider and implement an alternative that removes the Patterson Slough east and west spur trails.
- We also urge EBRPD to remove the Wetlands View Spur. As it is, the area at the southern end where Alameda County Public Works is conducting its work will be completely surrounded by trails. The addition of the spur would fragment habitat and bring human disturbance even closer to birds and wildlife utilizing the areas of ponding, and we assume adjacent wetlands habitat. We understand the need for access and therefore the proposed “multi-use” trails surrounding the area where Alameda County Public Works is conducting work, however, EBRPD should provide a discussion of how wildlife utilizing these areas would be protected from human disturbance, e.g. would vegetation be planted or be allowed to establish along the edges of the ponded

³ Miller, Scott G., Richard L. Knight, Clinton K. Miller. 1998. *Influence of Recreational Trails on Breeding Bird Communities*. Ecological Applications, 8: 162-169. doi:[10.1890/1051-0761\(1998\)008\[0162:|ORTOB\]2.0.CO;2](https://doi.org/10.1890/1051-0761(1998)008[0162:|ORTOB]2.0.CO;2)

⁴ Jordan, M. (2000). Ecological impacts of recreational use of trails: a literature review. *The Nature Conservancy, New York*.

⁵ Fletcher, Robert J. Jr., Shawn T. McKinney and Carl E. Bock. 1999. *Effects of recreational trails on wintering diurnal raptors along riparian corridors in a Colorado grassland*. J.Raptor Res. 33(3):233-239

⁶ A. Trulio, Lynne & R. White, Heather. (2017). Wintering Waterfowl Avoidance and Tolerance of Recreational Trail Use. *Waterbirds*. 40. 252-262. 10.1675/063.040.0306.

areas? Will dogs be restricted from trails in this area? Will Alameda County Public Works be responsible for maintenance activities of this area? Are there specific vegetation management requirements?

- An explanation should be provided regarding the rationale for a new multi-use trail within the Patterson Slough Natural Unit. Impacts of human disturbance on wildlife utilizing Patterson Slough, the mixed riparian forest and oak savannah must be identified and analyzed.
- The DEIR should indicate whether dogs will be allowed on any of the proposed new trails and if they are potential impacts must be identified and analyzed.

Information and analyses that should be incorporated into the DEIR:

- The DEIR should provide information regarding the elements of any construction that is proposed and identify and analyze impacts related to noise, lighting, vibration, alteration of terrain, length of time of disturbance, any construction window restrictions, etc.
- A biological monitor must be required for any construction disturbance adjacent to sensitive habitats and pre-constructions surveys and methodology should be discussed.
- Please provide a treatment plan for dealing with invasive species. This includes both invasive plants within the areas proposed and adjacent to restoration activities, as well nuisance species that may be attracted to the parking lot and picnic areas.
- Please include a description of the agricultural activity including whether there are any conditions that went with the land when the land was donated to EBRPD regarding the continuation of agriculture, if so, was there a specified location or acreage, water supply, whether there will be a farm stand, details that can be shared regarding the lease agreement, etc.

Under the cumulative impact analysis, the DEIR should address whether the elements proposed are consistent with the 2005 LUP, and how the addition of these 306 acres may affect elements of the LUP. As an example, the LUP states that the "Lake Unit" (former Dumbarton Quarry site) would become the recreational center of the park and that "large recreational spaces may not be needed in the future because of the eventual addition of the Lake Unit." If this is the case, why is there a need for a picnic area near the area to be restored to oak savanna and mixed riparian forest?

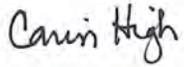
The cumulative impact section should also provide information on any reasonably foreseeable park construction that may occur within the lands covered by the LUP. As an example, there have been discussions for many years regarding the need to upgrade the Visitor Center. In October 2017, EBRPD issued a Request for Qualification for a Feasibility Study "to be conducted that consists of the following: site analysis, building and site facility program, conceptual building/site plans, and construction cost estimates." The 2005 LUP had analyzed four alternatives for the Visitor Center including relocation. If relocation is being considered, there could be cumulative impact ramifications for elements of the proposed "Restoration and Public Access Plan."

Thank you for the opportunity to provide scoping comments. As has been mentioned above, our organizations spent many years working to ensure the 306-acres of the Patterson Ranch lands would be protected for current and future generations. We have actively worked to promote the incredible wildlife values of the park through public outreach and through education programs such as the Habitat Means Home Poster Contest that we have sponsored for K-6 students in the Fremont, New Haven and Newark Unified School Districts. The poster contest celebrates the incredible habitat diversity of Coyote Hills Regional Park and emphasizes the need to protect "habitats" for plants and wildlife. This is emphasized in the spirit of the comments we have submitted.

We request that we be kept informed of any future opportunities to provide comments and that we be informed of the release of the DEIR.

We do have concerns regarding the proposed timeline for the release of the DEIR. The timeline presented during the scoping session indicated the DEIR would be released before the end of this year. While we do not wish for this process to drag on unnecessarily, we do hope the issues and concerns we have identified in this letter will be analyzed and incorporated into the DEIR.

Sincerely,



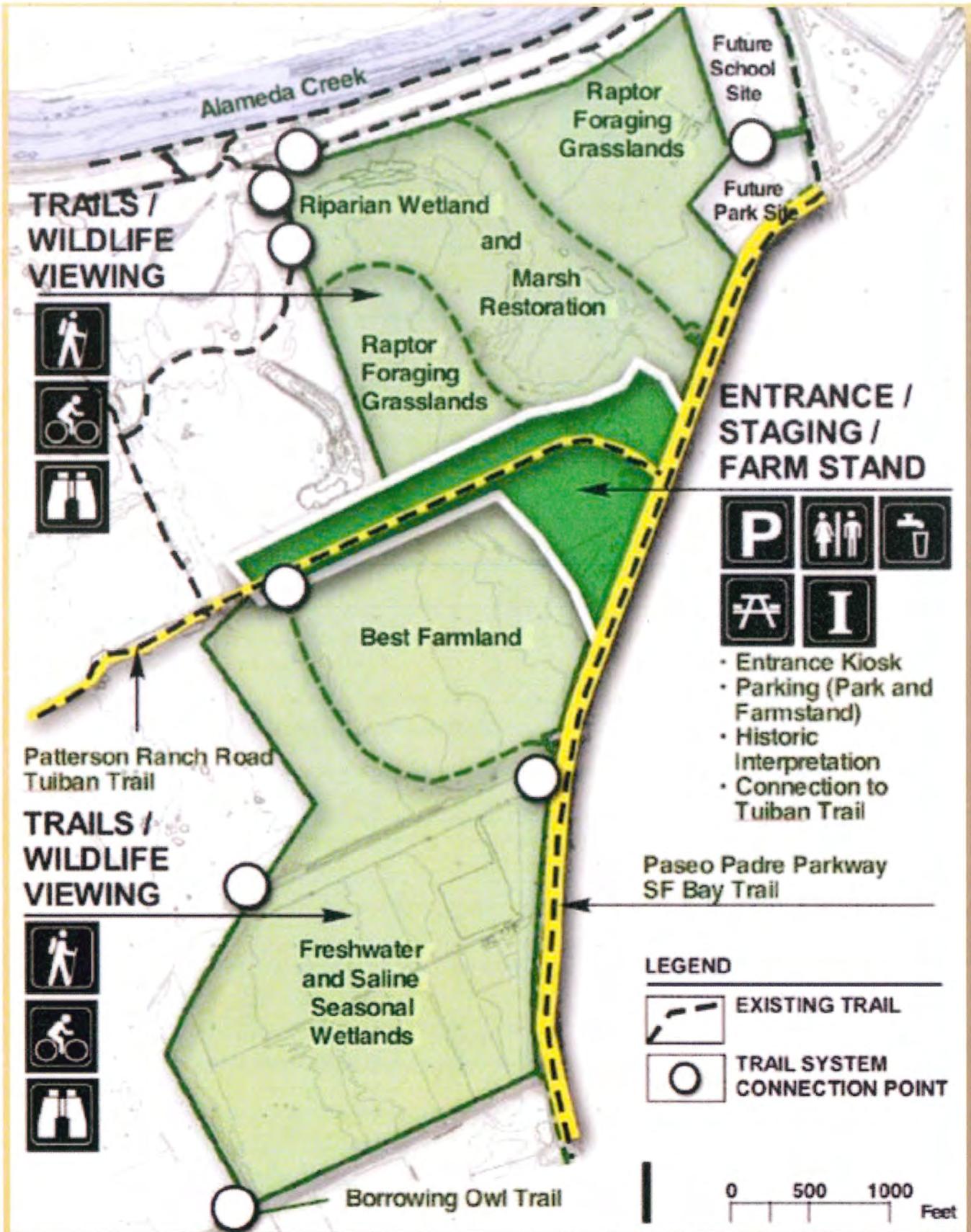
CCCR Co-Chair
cccrrefuge@gmail.com



CCCR/FCH Member
cccrrefuge@gmail.com



President OAS
President@OhloneAudubon.org



Potential alternative location for parking lot and picnic area

Access for parking lot, picnic area, farm operations



Native American Heritage Commission
Native American Contacts

2/20/2017

Coastanoan Rumsen Carmel Tribe

Tony Cerda, Chairperson

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rumsen@aol.com

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Ohlone/Costanoan

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Ohlone/Costanoan

Amah Mutsun Tribal Band of Mission San Juan Bautista

Irene Zwielerlein, Chairperson

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Ohlone/Costanoan

Northern Valley Yokuts

Bay Miwok

No Air-Response

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Ohlone / Costanoan

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Plains Miwok

Patwin

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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 Resource Section 5097.98 of the Public Resources Code

This list is only applicable for contacting local Native Americans with regard to cultural resources assessments for the **Questa East Bay Regional Park District- Habitat Restoration, Alameda County**

Corrina Gould, Spokesperson Confederated Villages of Lisjan
10926 Edes Ave Oakland CA 94603
510-575-8408 corrinagould@gmail.com

6/18/18

Karla Cuero
kcuero@ebparks.org

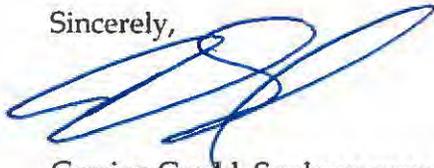
Dear Ms Cuero,

I am writing on behalf of the Confederated Villages of Lisjan/Ohlone in response to the Coyote Hills Restoration Project.

Our tribe has some concerns about this project as it is located within an area of sensitivity and known cultural sites. We noticed in your presentation that you stated that there would be minimal excavation. What does designed to minimize excavation mean? How much is minimal excavation? Can you please also tell us who the consulting agencies you are working with are? Was the NAHC and OHP given notice about this project? We are requesting that you send all reports and associated site records for this project to the tribe. As this project has a known site within its boundaries, how does the EBRPD plan to keep the general public from looting or destroying our sacred site?

Furthermore, the Confederated Villages of Lisjan would like AB52 consultation on this project, any project since June 2015 and any projects occurring currently and all future projects.

Sincerely,



Corrina Gould, Spokesperson Confederated Villages of Lisjan

Himr'n Tribe

5816 Thornton Newark CA 94560

6/18/18

Karla Cuero

East Bay Regional Park District

**Dear Karla Cuero
East Bay Regional Park District:**

I am submitting this letter on behalf of my Tribe, Himr'n in response to the Coyote Hills Restoration Project scoping meeting.

Our tribe is requesting any associated site records and reports for the project area that you are planning to create land disturbance within this project site. We are concerned with excessive land movement within a known area of cultural historic relevance to the tribe and would like to know how you plan to address the area of sensitivity and possible disturbance of known sites as well as possible not known sites? What is EBRPD plans to include signage for the area about the Native Peoples/Ohlone Tribes of the area?

Furthermore, Himr'n Tribe is asking for AB52 local consultation on this project and any projects that EBRPD has started since June of 2015 and any projects going into the future.

Sincerely,



Ramona Garibay

Himr'n Tribal Historic Preservation Officer

Himr'n Tribe

5816 Thornton Newark CA 94560

6/18/18

Karla Cuero

East Bay Regional Park District

**Dear Karla Cuero
East Bay Regional Park District:**

I am submitting this letter on behalf of my Tribe, Himr'n in response to the Coyote Hills Restoration Project scoping meeting.

Our tribe believes that there are known tribal cultural resources on the site that EBRPD intends to move land on during this project. Known sites have been found along Alameda Creek and Crandall Creek Trail and to our knowledge there are some fencing that currently cordons off part of the site, we would like to know what measures would be taken to stop the potential increase of looting and foot traffic on our sacred sites? Were the Native American Heritage Commission and Office of Historical Preservation given notice about this project? We would like for the Draft Environmental Impact Report to Include comments for all areas of the following areas; archeological, pre-contact and tribal cultural resources. We also notice that you are hoping to plant oak trees in this project, we would like to request that if this project is approved, you will use the same native stock that already exists in the park area.

Furthermore, Himr'n Tribe is asking for AB52 local consultation on this project and any projects that EBRPD has started since June of 2015 and any projects going into the future.

Sincerely,



Ruth Orta,

Himr'n Traditional Tribal Chair

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone (916) 373-3710
Fax (916) 373-5471
Email: nahc@nahc.ca.gov
Website: <http://www.nahc.ca.gov>
Twitter: @CA_NAHC



JUL - 2 2018

June 27, 2018

Karla Cuero
East Bay Regional Park District
PO Box 5381
Oakland, CA 94605

RE: SCH#2018062002 Coyote Hills Restoration and Public Access Project

Dear Ms. Cuero,

The Native American Heritage Commission has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.), specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit. 14, § 15064.5 (b) (CEQA Guidelines Section 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared. (Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code § 21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code § 21084.3 (a)). **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. § 800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments. **Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. **Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:** Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
 - a. A brief description of the project.
 - b. The lead agency contact information.
 - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
 - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).
2. **Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report:** A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subs. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
 - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).
3. **Mandatory Topics of Consultation If Requested by a Tribe:** The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
 - a. Alternatives to the project.
 - b. Recommended mitigation measures.
 - c. Significant effects. (Pub. Resources Code § 21080.3.2 (a)).
4. **Discretionary Topics of Consultation:** The following topics are discretionary topics of consultation:
 - a. Type of environmental review necessary.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.
 - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).
5. **Confidentiality of Information Submitted by a Tribe During the Environmental Review Process:** With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).
6. **Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:** If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
 - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.

- b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).
7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
- a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).
8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code § 21082.3 (a)).
9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).
10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
- a. Avoidance and preservation of the resources in place, including, but not limited to:
 - i. Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i. Protecting the cultural character and integrity of the resource.
 - ii. Protecting the traditional use of the resource.
 - iii. Protecting the confidentiality of the resource.
 - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d. Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
 - e. Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
 - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).
11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
 - b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code § 65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>

NAHC Recommendations for Cultural Resources Assessments

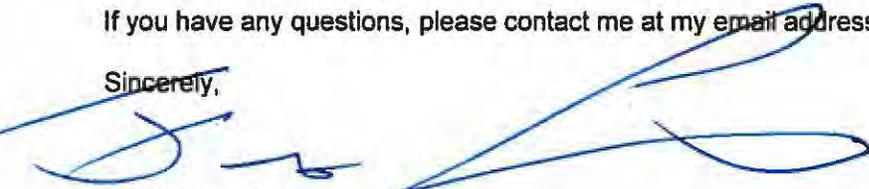
To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have been already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. 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.
 - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.
3. Contact the NAHC for:
 - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
 - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

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

Sincerely,



Frank Lienert
Associate Governmental Program Analyst

cc: State Clearinghouse

Karla Cuero

From: Rod Schurman <rods@unionsanitary.ca.gov>
Sent: Monday, August 06, 2018 1:10 PM
To: Karla Cuero
Subject: Coyote Hills Restoration & Public Access Project, Preliminary Comments
Attachments: USD_BlockbookPages.zip

Hi Karla,

USD received the EIR notice for the subject project and we wanted to provide some preliminary project comments NOT related to the EIR:

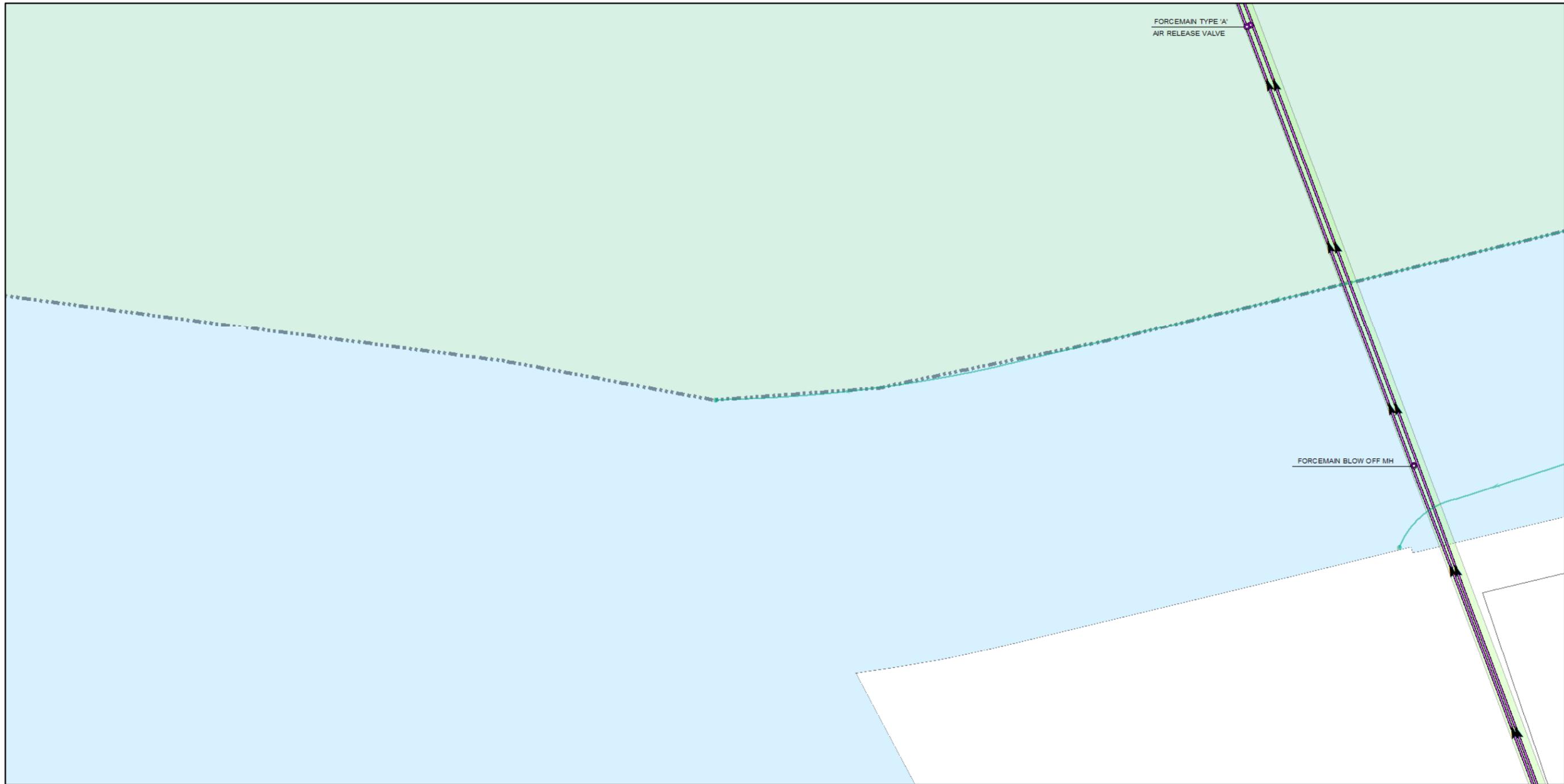
- **Project Area vs. USD Service Area:** The project area is outside of USD's Service Area. If restrooms or other project structures are intended to discharge wastewater to USD sanitary sewer collection system, the area will need to be Annexed via LAFCo of Alameda County.
- **Private Sewer Improvements:** It is assumed all sanitary sewer improvements for the project will be private. Note that all sanitary sewer construction outside of a building's footprint must be inspected and approved by USD (if it will discharge wastewater to USD). Plans will need to be submitted to USD for review even if no wastewater will be discharged to USD so that USD can confirm that is the case. Please complete the following form when submitting plans to USD for review, <https://www.unionsanitary.ca.gov/images/documents/PlanCheckRequestPDF.pdf>
- **USD Facilities:** USD has twin 33" Sewer Force Mains (FMs) that cross Paseo Padre near Kaiser Dr. and are on the west side of Paseo Padre in the wetlands to well north of the project limits (see attached maps). These 33" pipes are within USD easements and are single-gasketed joint RCP and as such are susceptible to joint leakage/damage from excessive loads. Any construction within our easements or construction traffic over our FMs requires specific approval from USD. For construction traffic/haul roads, USD requires an Encroachment Permit that may include a specific agreement and temporary improvements to bridge over our FMs (depending upon the weight of the vehicles, ranges from steel plates to railcar bridges).
- **Improvements in USD Easements:** For permanent improvements in our easements, USD only allows surface improvements such as landscaping, roadways and parking, including sidewalks, curbs & gutters. No permanent structures and trees are allowed (plants, bushes and groundcover are allowed). Utilities may cross our easements/FMs provided there is sufficient clearance between them. Plans must be submitted for review and approval, for more info see <https://www.unionsanitary.ca.gov/permits-and-fees/forms-documents-ordinances>

USD has not other comments at this time. Please contact me if any questions.

Regards,
Rod Schurman, P.E.
Technical Services Engineer
Customer Service
Direct (510) 477-7617
Fax to email (510) 477-7317

Union Sanitary District

5072 Benson Rd., Union City, CA 94587-2508
P.O. Box 5050, Union City, CA 94587-8550
(510) 477-7500 www.unionsanitary.ca.gov

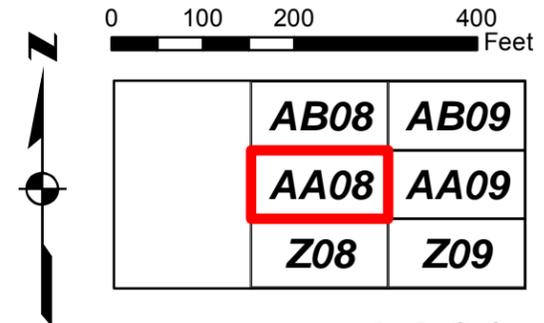


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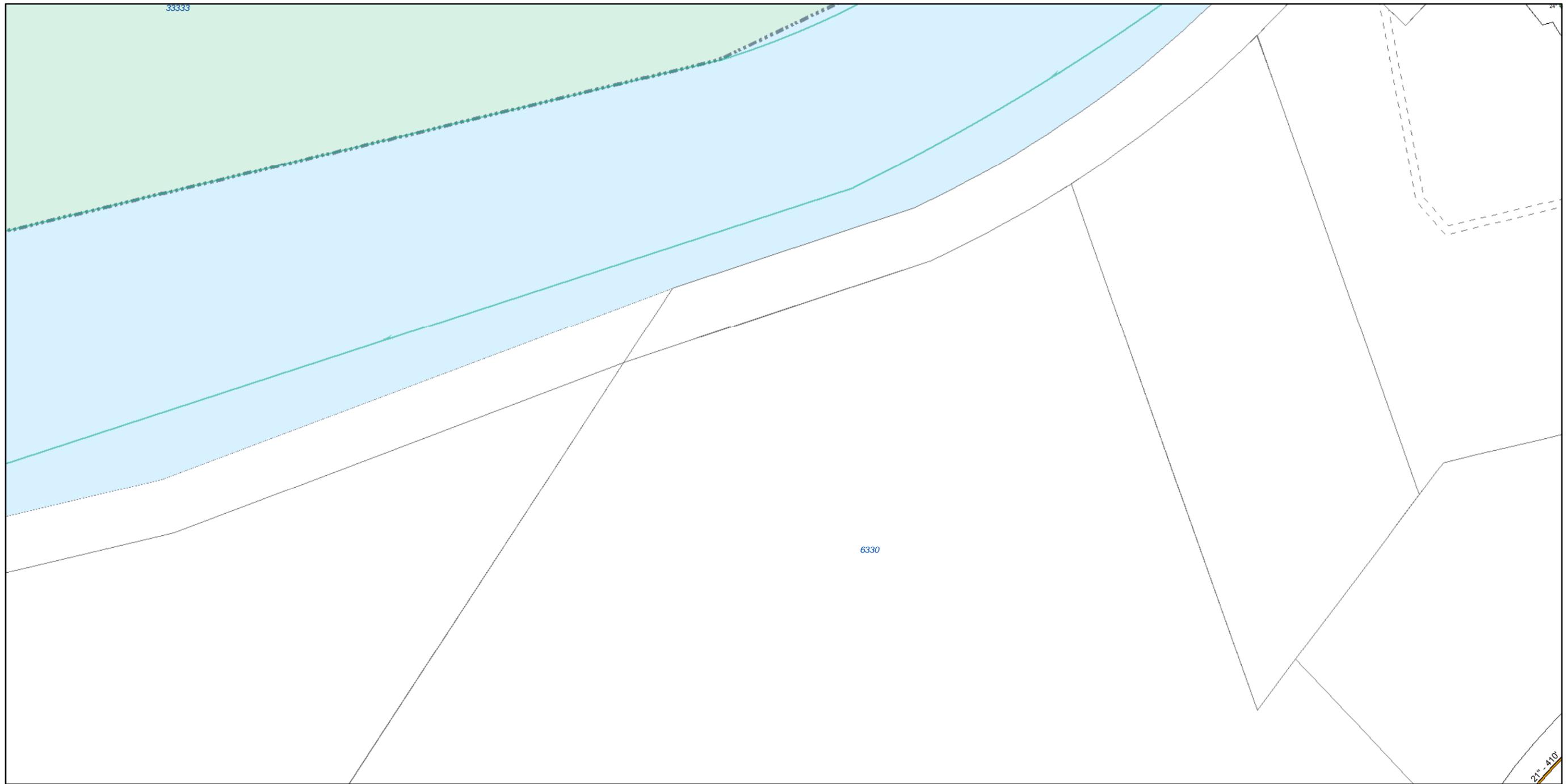
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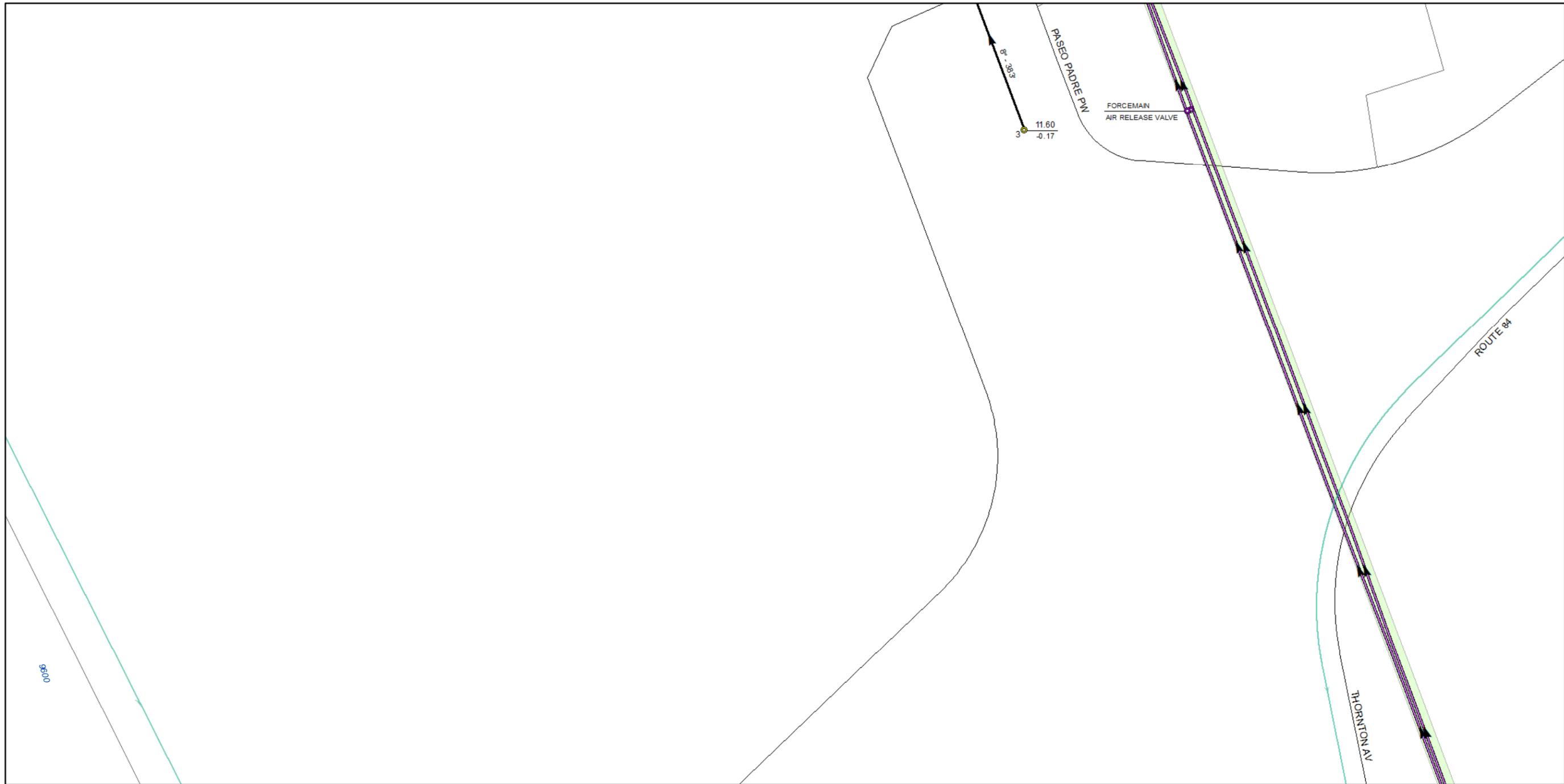
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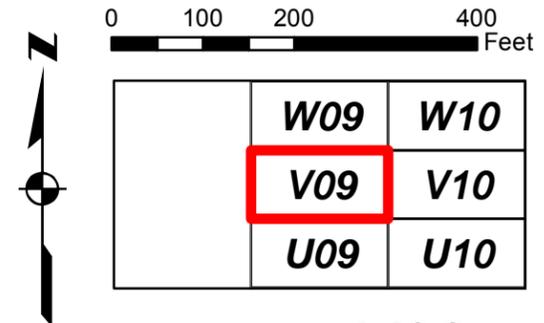


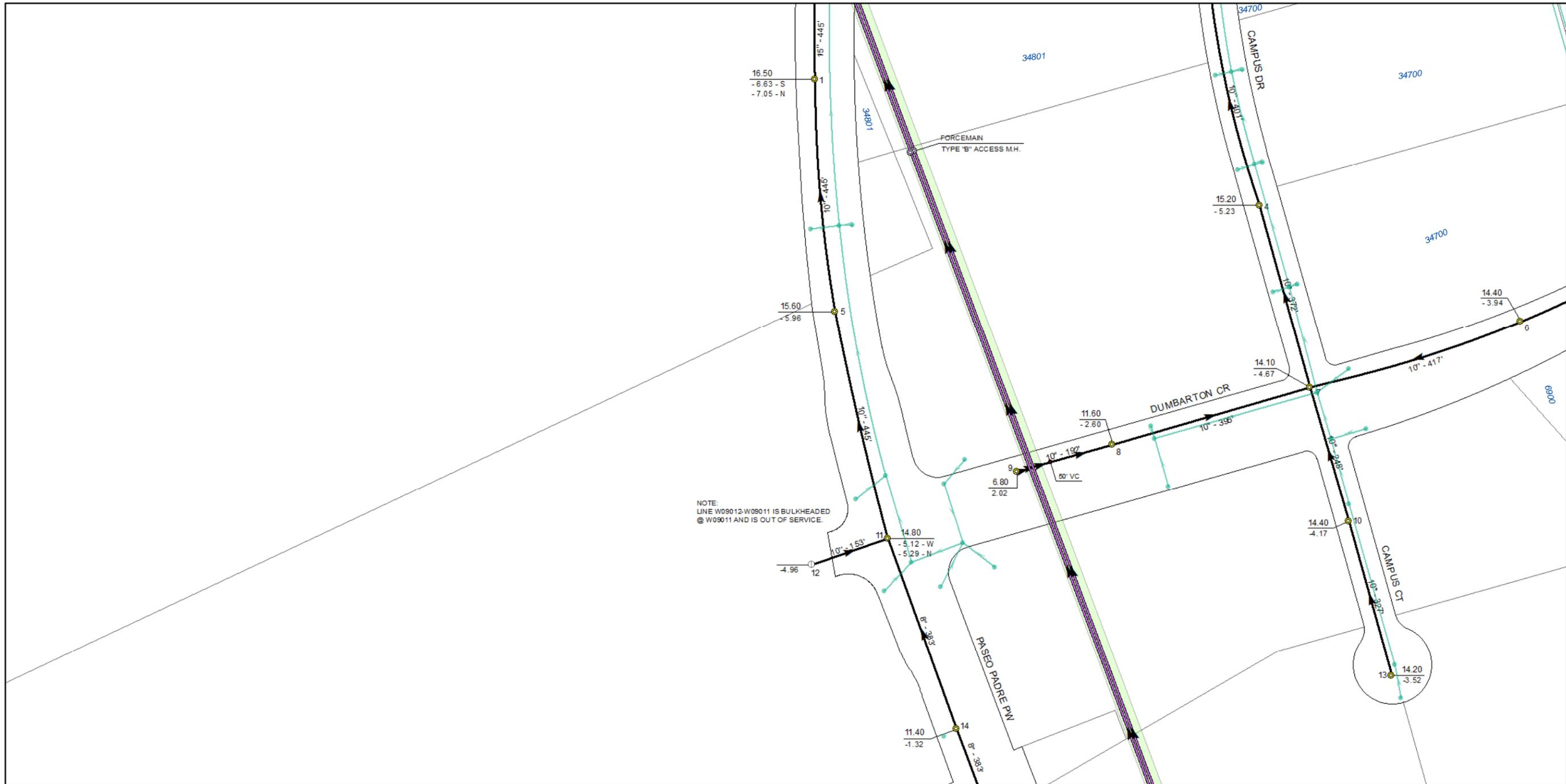
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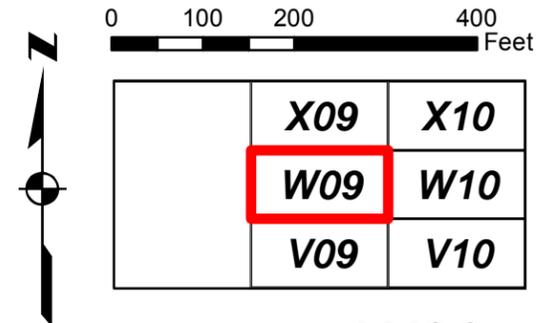


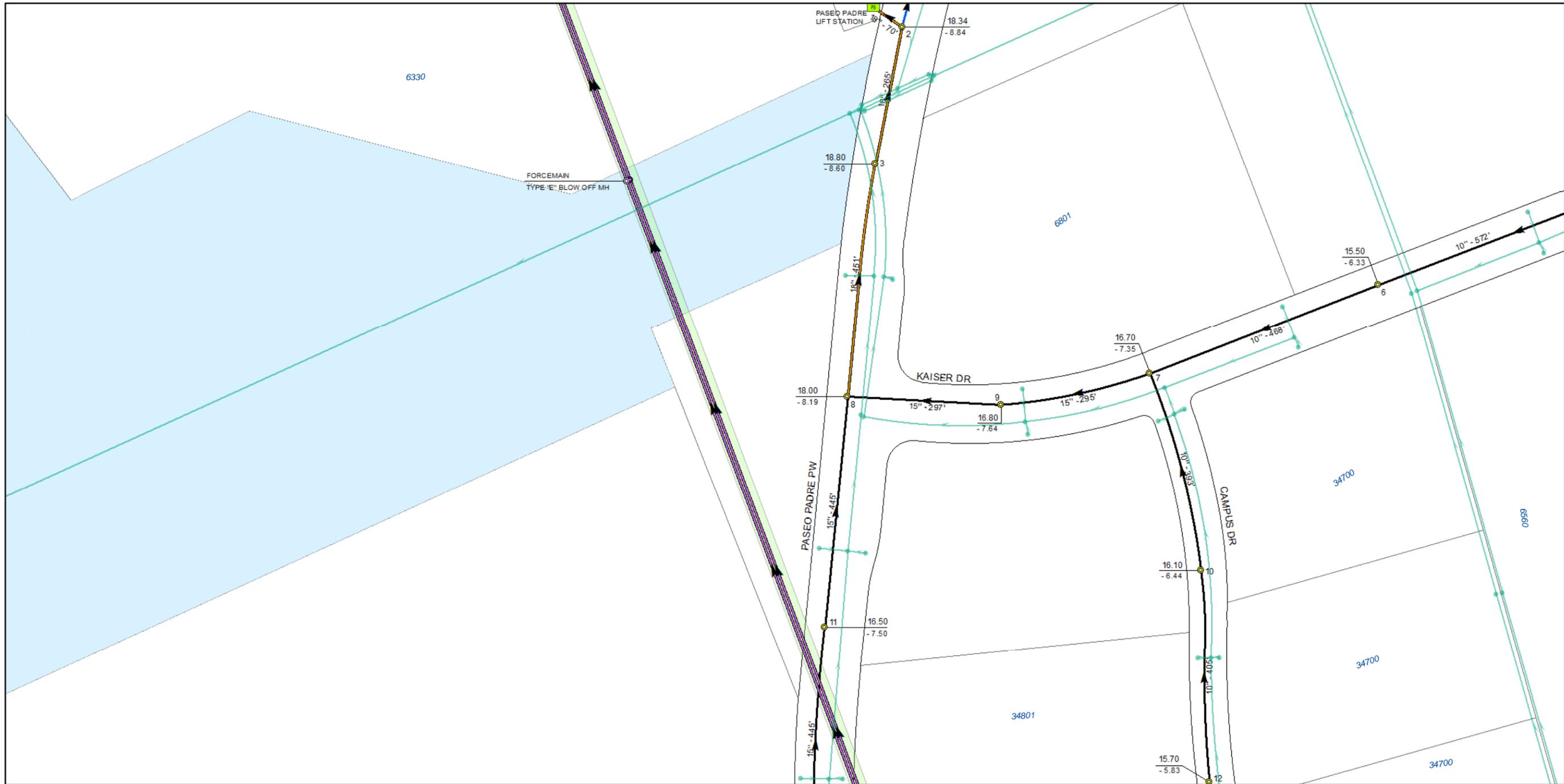
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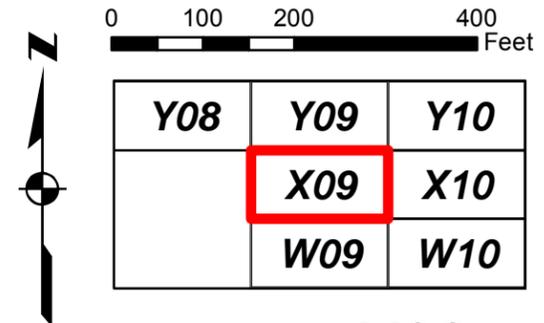


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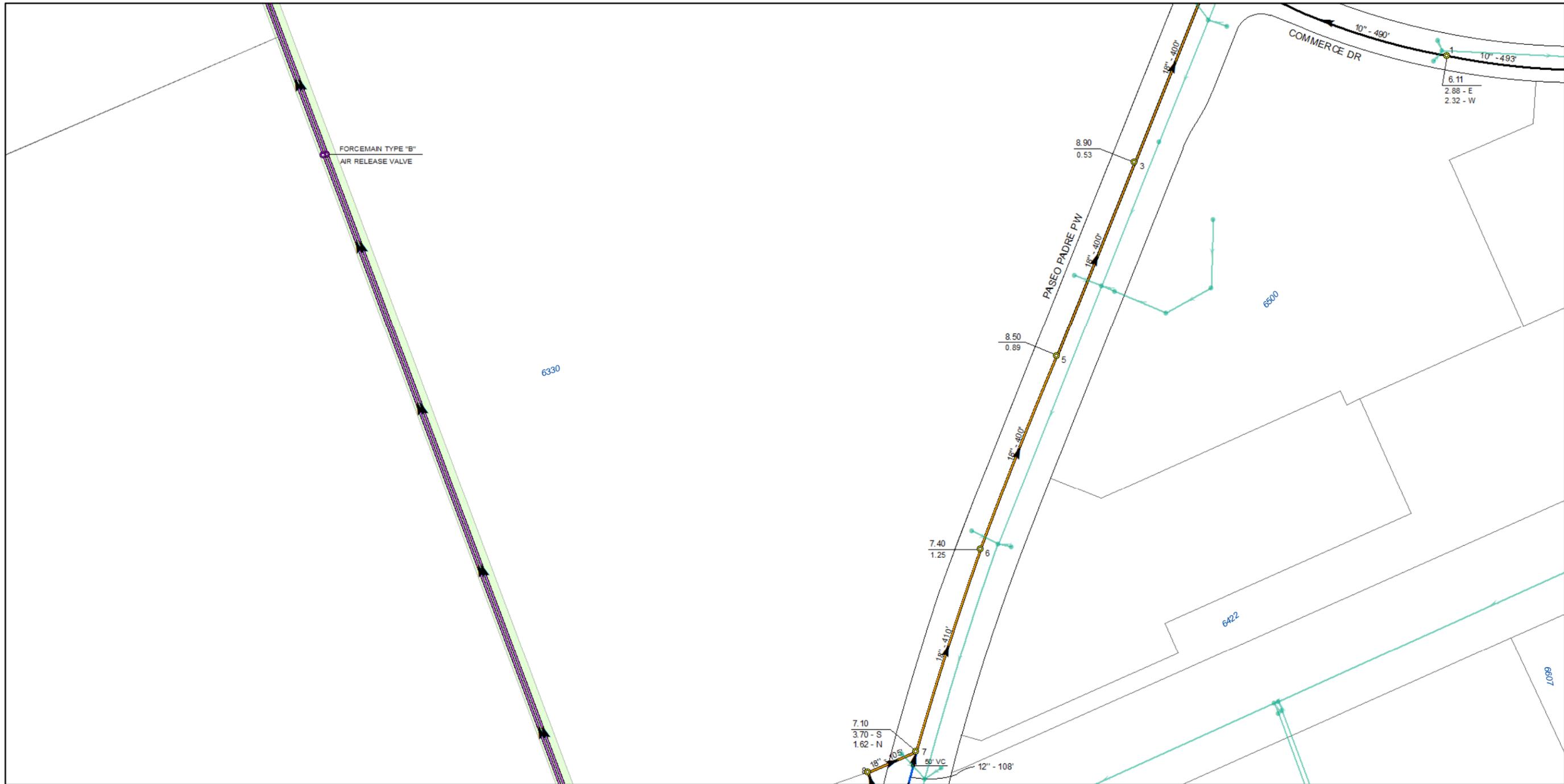
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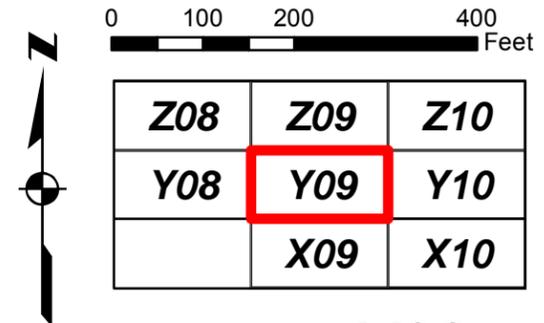


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- ABANDON SEWER MAINS
- STORM DRAIN
- PUBLIC RIGHT-OF-WAY
- PRIVATE RIGHT-OF-WAY
- B.A.R.T. TRACKS
- OTHER RAILROAD TRACKS
- EARTHQUAKE FAULT
- PROPERTY BOUNDARY
- ACFC & WCD PROPERTY (FLOOD CONTROL CHANNELS)
- ACWD PRIORITY 1 NOTIFICATION AREA
- ACWD PRIORITY 2 NOTIFICATION AREA
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- USAGE AREAS
- SHEET PILES
- MANHOLE DEPTH
- FLOWLINE INVERT ELEVATION
- PARCEL ADDRESS

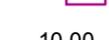
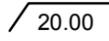
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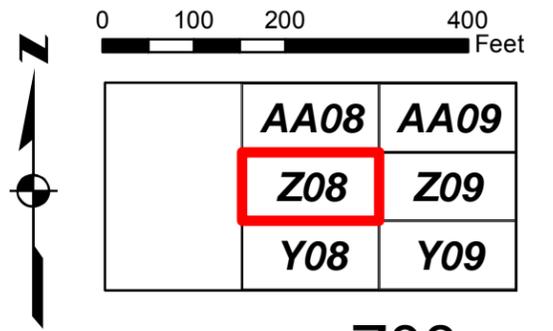


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-  STORM DRAIN MANHOLE
-  JUNCTION STRUCTURE
-  FORCE MAIN ACCESS MANHOLE
-  FORCE MAIN AIR RELEASE VALVE
-  FORCE MAIN BLOW OFF
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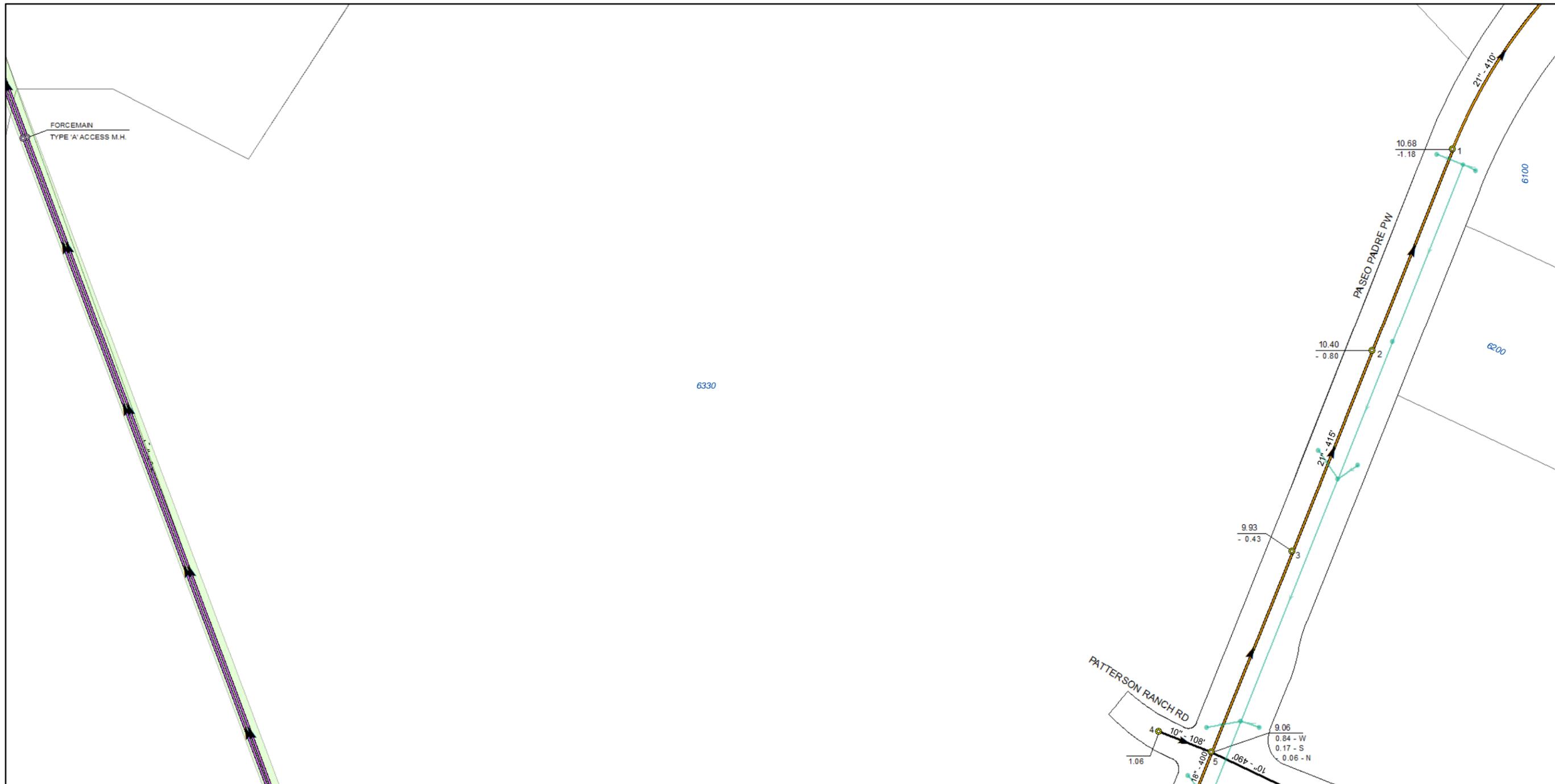
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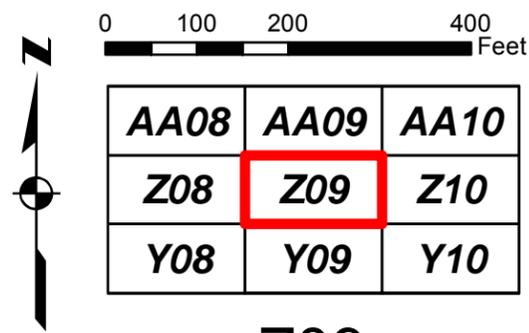
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Z09



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Sept 12, 2018

Ramona Garibay
 Himr'n Tribal Historic Preservation Officer
 5816 Thornton Avenue
 Newark, CA 94560

RE: East Bay Regional Park District Coyote Hills Restoration and Public Access Project, Fremont, Alameda County

Dear Ramona,

Thank you for your letter dated June 18, 2018. You requested information about the Project and we anticipate that many of your questions will be covered in the Draft Environmental Impact Report (EIR). The Draft EIR will tentatively be available for public review and comment in late October 2018, and we welcome your input on these and other topics of interest to you.

Your letter also requests consultation under AB 52 (codified in Public Resources Code § 21080.3.1). The District notified the Native American Heritage Commission (NAHC) of this project in February 2017. The NAHC provided a list of Native American Tribes with an interest in the project area, and the Representative from each of these Tribes was sent correspondence regarding the project inviting Tribes to notify the District if they wished to engage in consultation (please find this list attached). Andrew Galvan was listed as the contact for the Ohlone Indian Tribe and identified as the Most Likely Descendant. Mr. Galvan requested consultation with the Park District which was held on April 26, 2018.

Additionally, you have requested a list of projects initiated on or after June 2015. We are providing the requested information in the table below. Pursuant to AB 52, the Park District, as part of CEQA review for each of these Projects, reached out to the NAHC for a list of California Native American Tribes to be notified. Accordingly, notification was sent to each tribal representative identified on that list for each of these projects.

Project Name/ CEQA Document	Location	Date of Invitation to Tribal Consultation
Black Diamond Mines Land Use Plan Amendment (LUPA)-EIR	Antioch, CA	10/13/2016
Coyote Hills Restoration & Public Access - EIR	Fremont, CA	02/22/2017
Doolittle – SF Bay Trail – IS/MND	Oakland, CA	01/04/2018
Dunsmuir to Chabot Trail – IS/MND	Oakland, CA	03/22/2018
Encinal Beach Restoration – IS/MND	Alameda, CA	Nov. 2016
Garin to Vargas Bay Area Ridge Trail – IS/MND	Fremont, CA	12/15/2017
SF Bay Trail: Lone Tree Point – IS/MND	Rodeo, CA	12/22/2017
Miller/Knox LUPA - EIR	Richmond, CA	10/23/2017
Pt. Isabel Water Trail Launch – IS/MND	Richmond, CA	04/06/2017
Sibley LUPA - EIR	Oakland, CA	9/25/2017
Tilden Sediment Basin Dredging – IS/MND	Berkeley, CA	Mar. 2016
SF Bay Trail: Point Molate – IS/MND	Richmond, CA	2/2/2016

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As you have expressed an interest in receiving notifications of future projects and project updates, the Park District will add you to our notification list. Thank you for your comments, and we invite your participation during the Public Review Period for the Draft EIR.

Sincerely,

Karla Cuero
Project Coordinator

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Sept 12, 2018

Corrina Gould
Spokesperson Confederated Villages of Lisjan
10926 Edes Ave.
Oakland, CA 94603

RE: East Bay Regional Park District Coyote Hills Restoration and Public Access Project, Fremont, Alameda County

Dear Corrina,

Thank you for your letter dated June 18, 2018. You requested information about the Project and we anticipate that many of your questions will be covered in the Draft Environmental Impact Report (EIR). The Draft EIR will tentatively be available for public review and comment in late October 2018, and we welcome your input on these and other topics of interest to you.

Your letter also requests consultation under AB 52 (codified in Public Resources Code § 21080.3.1). The District notified the Native American Heritage Commission (NAHC) of this project in February 2017. The NAHC provided a list of Native American Tribes with an interest in the project area, and the Representative from each of these Tribes was sent correspondence regarding the project inviting Tribes to notify the District if they wished to engage in consultation (please find this list attached). Andrew Galvan was listed as the contact for the Ohlone Indian Tribe and identified as the Most Likely Descendant. Mr. Galvan requested consultation with the Park District which was held on April 26, 2018.

Additionally, you have requested a list of projects initiated on or after June 2015. We are providing the requested information in the table below. Pursuant to AB 52, the Park District, as part of CEQA review for each of these Projects, reached out to the NAHC for a list of California Native American Tribes to be notified. Accordingly, notification was sent to each tribal representative identified on that list for each of these projects.

Table with 3 columns: Project Name/CEQA Document, Location, Date of Invitation to Tribal Consultation. Rows include projects like Black Diamond Mines Land Use Plan Amendment, Coyote Hills Restoration, Doolittle - SF Bay Trail, etc.

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Sincerely,

Karla Cuero
Project Coordinator

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Sept 12, 2018

Ruth Orta
 Himr'n Traditional Tribal Chair
 5816 Thornton Avenue
 Newark, CA 94560

RE: East Bay Regional Park District Coyote Hills Restoration and Public Access Project, Fremont, Alameda County

Dear Ruth,

Thank you for your letter dated June 18, 2018. You requested information about the Project and we anticipate that many of your questions will be covered in the Draft Environmental Impact Report (EIR). The Draft EIR will tentatively be available for public review and comment in late October 2018, and we welcome your input on these and other topics of interest to you.

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Sincerely,

Karla Cuero
Project Coordinator

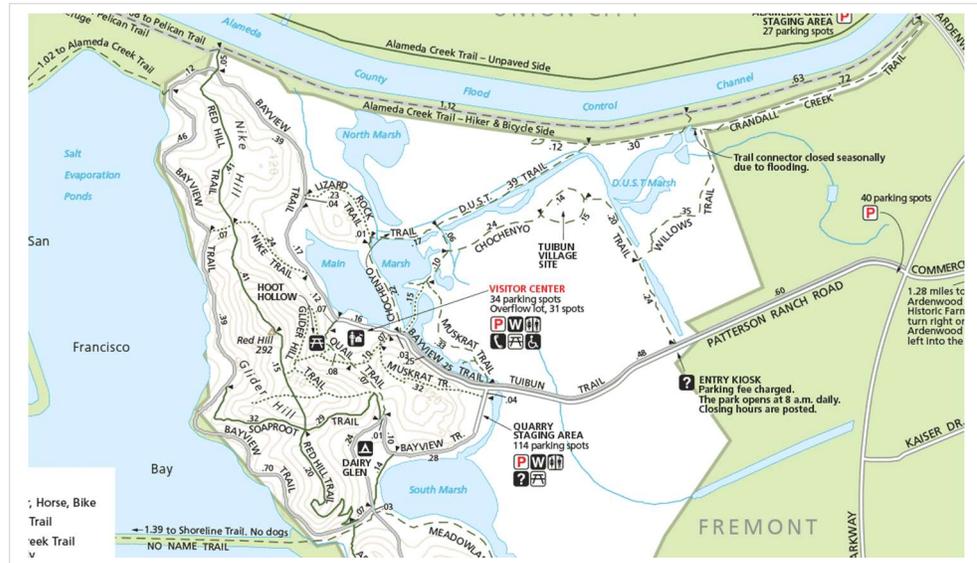
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Appendix C

Traffic Impact Report

Coyote Hills Regional Park Expansion Traffic Impact Report



February 2019

Prepared for:

East Bay Regional Parks

Prepared by:



In association with



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1 Introduction

This report presents an analysis of existing and future transportation conditions near the Coyote Hills Regional Park (Park) in the City of Fremont. This study is being performed on behalf of the East Bay Regional Parks District (District) to assess potential transportation impacts associated with the Park's planned improvements (Project).

The existing Coyote Hills Regional Park is in the northwest corner of the City of Fremont, east of the Don Edwards San Francisco Bay Wildlife Refuge, and north of State Highway Route 84. The proposed Park expansion includes a new entry kiosk, parking lot, restroom and family picnic facilities, entry area improvements, Park signage, nearly 4 miles of hiking trails, wildlife platforms, and approximately 240 acres of habitat restoration and enhancement lands.

The primary study area is the intersection of Paseo Padre Parkway / Patterson Ranch Road / Commerce Drive, which is the park's primary vehicular access, and an important pedestrian and bicycle access. Figure 1 presents a map of the project area.

Under existing conditions, this report assesses the vehicle traffic operations, bicycle and pedestrian access, and collisions within the last ten years. Under future conditions, this report assesses the projected vehicle traffic operations with planned local growth under Near-Term and Cumulative conditions, without and with the proposed project. The report concludes with a summary of impacts and presents potential improvements to resolve existing deficiencies and those that could arise with background growth and the proposed project.

The transportation study was completed in accordance with the criteria established by the City of Fremont.



Figure 1 Project Study Area

2 Existing Transportation Setting

This section provides an evaluation of traffic and transportation issues related to the Project. Descriptions of the existing roadway network, intersections, transit service, and bicycle and pedestrian facilities are provided below.

2.1 VEHICLE NETWORK

The following section describes the vehicle, pedestrian, and bicycle facilities; and transit service that provide access to the project site.

Paseo Padre Parkway is a major arterial that runs along the City of Fremont's western periphery; it provides access between Interstate 880 (I-880) and the City of Newark. In the project vicinity, Paseo Padre Parkway runs in the north-south direction and has two lanes in each direction near the Project; on-street parking is not allowed. The posted speed limit is 45 MPH.

Commerce Drive runs in the east-west direction between Paseo Padre Parkway and Tupelo Street, and has a posted speed limit of 35 MPH. Commerce Drive services office uses between Paseo Padre Parkway and Ardenwood Boulevard, and recreational and residential uses between Ardenwood Boulevard and Tupelo Street. It has one through lane and one parking lane in each direction.

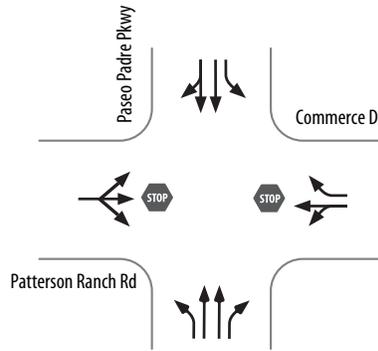
Patterson Ranch Road is the primary vehicular access to the Park and provides connection to multiple trails that connect at the Park. The road has two lanes and runs east-west within the project study area.

Ardenwood Boulevard is a four-lane arterial running north-south between Alameda Creek and Fremont City Limits / SR-84. North of Paseo Padre Parkway, Ardenwood Boulevard becomes Union City Boulevard, and is one alternative route to Interstate 880. South of State Route 84 / Fremont City Limits, Ardenwood Boulevard becomes Newark Boulevard. Ardenwood Boulevard has a posted speed limit of 40 mph and runs along a short section of the Park's east boundary.

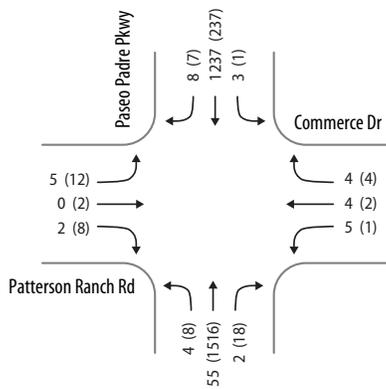
Paseo Padre Parkway / Patterson Ranch Road / Commerce Drive is a four-legged, unsignalized intersection. Both Patterson Ranch Road and Commerce Drive are subject to minor-approach stop control (east and west legs); Patterson Ranch Road is not subject to traffic control, although traffic is required to yield to pedestrians and bicyclists in the crosswalks. The right turn movements from northbound Paseo Padre Parkway and Commerce Drive provide channelized turn lanes ("pork chops") subject to yield-control to pedestrians and intersecting traffic. There are marked crosswalks at all four legs of the intersection.

Pedestrian, bicycle and vehicle counts were collected at the study intersection on June 23, 2017. The counts and existing intersection geometry are presented on Figure 2.

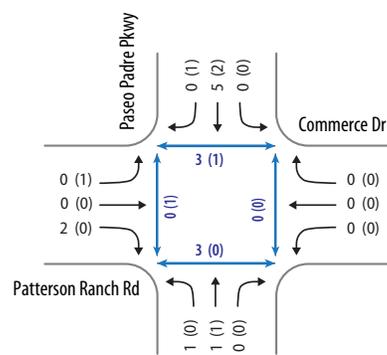
Lane Geometry



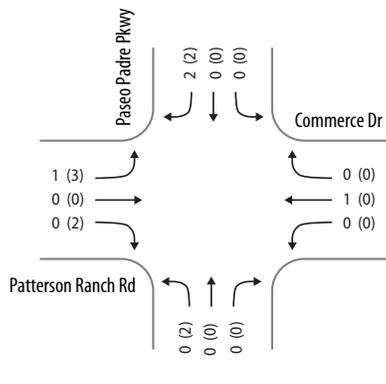
Existing Peak Hour Vehicle Volumes



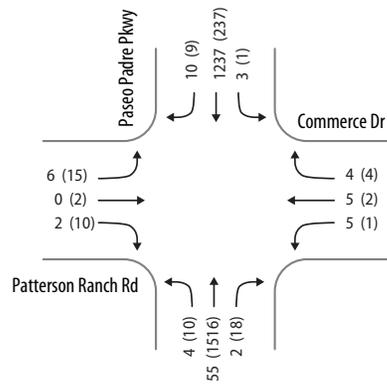
Existing Peak Hour Pedestrian and Bicyclist Volumes



Plus Project Peak Hour Vehicle Volumes



Existing Plus Project Peak Hour Vehicle Volumes



LEGEND: xx AM (xx) PM Stop Sign-Controlled Pedestrian Volumes Vehicle/Bicycle Volumes

Figure 2 – Existing Intersection Geometry, Existing Base and Plus Project Peak Hour Volumes
Coyote Hills Regional Park Expansion

2.2 PEDESTRIAN AND BICYCLE CIRCULATION

The **San Francisco Bay Trail** is a 500-mile walking and cycling path around the entire San Francisco Bay running through all nine Bay Area counties. In the project area, the Bay Trail runs along the west side of Paseo Padre Parkway. There is a planned route to connect to Alameda Creek Trail and Union City Boulevard on the north side of the project site. To the south, the Bay Trail connects with the Dumbarton Bridge via on-street bike lanes (Class 2 bikeways) and Coyote Creek Trail. Pedestrian access into the Park is also provided by the **Tuibun Trail**, which runs parallel to Patterson Ranch Road between Paseo Padre Parkway and the Visitor Center.

Bike lanes, or Class II bikeways, are provided on Paseo Padre Parkway. The existing bike lanes are a five to six-foot paved area demarcated by a painted line. There is no additional vertical or horizontal buffer provided between bicycle and vehicle traffic on Paseo Padre Parkway. There are no marked bikeway facilities on Commerce Drive and Patterson Ranch Road.

There are 10-foot **sidewalks** on the east side of Paseo Padre Parkway and an eight-foot sidewalk on south side of Commerce Drive. Pedestrian access on the west side of Paseo Padre Parkway is provided by the Bay Trail. Pedestrian access along Patterson Ranch Road is provided by the Tuibun Trail.

2.3 TRANSIT

Alameda-Contra Costa County (AC) Transit provides bus transit service to cities in the East Bay. The nearest transit stops to the project study area are located at the intersection of Ardenwood Boulevard and Commerce Drive, 1,500 feet east of Paseo Padre Parkway.

Route SB is a regional commuter route between San Francisco and Fremont. Route SB travels along Ardenwood Boulevard and Union City Boulevard in the vicinity of the project site. Route SB only operates on weekdays, in the westbound direction between 5:25 a.m. and 9:00 a.m. and in the eastbound direction between 4:00 p.m. and 8:00 p.m. on 30-minute headways.

Route 232 is a local route that travels along Paseo Padre Parkway and Ardenwood Boulevard. Route 232 operates between NewPark Mall in the City of Newark and the Fremont BART station; it also stops at the Union City BART station. Route 232 operates with 60-minute headways on weekdays between 5:30 a.m. and 7:30 p.m. and during the weekend between 7:30 a.m. and 7:30 p.m.

Route 621 is a school service route open to the public that travels along Paseo Padre Parkway and Ardenwood Boulevard. Route 621 is a single-bus route that starts at the intersection of Ardenwood Boulevard, & Commerce Drive starting every weekday at 7:15 am and ending at Thornton Jr. High School. The returning bus starts at Thornton Jr. High School at 1:00 p.m. on Wednesday and 2:45 p.m. all other weekdays.

3 Proposed Project

The Coyote Hills Restoration and Public Access Project aims to restore habitat and add public access facilities to a 306-acre parcel that would become part of Coyote Hills Regional Park. The 306-acre expansion area borders the east side of the existing Regional Park; is bounded to the west by Ardenwood Boulevard and Paseo Padre Parkway; and is bounded to the north by the Alameda Creek Flood Control Channel. The proposed Park expansion includes a new entry kiosk, parking lot, restroom and family picnic facilities, entry area improvements, Park signage, four miles of hiking trails, wildlife platforms, and approximately 240 acres of habitat restoration and enhancement lands. The proposed project would also reconfigure the main Park entrance and formalize, i.e., pave and mark, some vehicle parking that currently occurs in an unpaved area west of Paseo Padre Parkway (Figure 3).

The existing peak hour vehicle trip generation at the park was estimated based on traffic counts of vehicles entering and exiting from Patterson Ranch Road at Paseo Padre Parkway. Traffic counts were collected on a typical weekday, June 23, 2017, and ingress and egress summarized in Table 1.

Table 1 Coyote Hills Regional Park Expansion Trip Generation

Scenario and Approach	AM Peak Hour (7-9 AM)			PM Peak Hour (4-6 PM)		
	In	Out	Total	In	Out	Total
Existing Trip Generation	16	7	23	17	22	39
Plus Project Growth (25%)	4	1	5	4	5	9
Existing plus Project Trip Generation	20	8	28	21	27	48

The East Bay Regional Parks District estimates that the park expansion will result in 25 percent more visitors during weekday AM and PM peak hours. Coyote Hills is increasing its size by approximately 25 percent, from 1266 acres by 306 acres. In the AM peak hour, Coyote Hills generates .02 trips / acre (five trip increase) and in the PM peak hour, Coyote Hills generates .03 trips / acre (nine trip increase).

The Institute of Transportation Engineers (ITE) Trip Generation (9th Edition) has data on County parks, with acreage ranging from less than 100 acres up to 1200 acres. In the AM peak hour, the average rate is 0.02 trips / acre, and in the PM peak hour, the average rate is 0.09 trips / acre (27 trip increase). Parks sampled by ITE ranged from less than 100 acres to 1200 acres. The park trip rates were highest for the smallest (<100 acres) and largest parks (1150 acres), each generating 10-12 trips in the AM peak hour and 65-75 trips in PM peak hour. The park trip rates were lowest for the two mid-size parks (250 and 550 acres), each generating between two and five trips in the AM peak hour and approximately 25 trips in the PM peak hour. The ITE data showed no correlation between park size and trip rates.

Coyote Hills Regional Park Expansion Project Traffic Study

Site amenities and programming varied widely between the ITE sampled parks, which included boating/swimming, ball fields, soccer fields, camp sites, picnic facilities and general open space. Sites were surveyed in 1970s and 2000s in New Jersey, California and North Carolina.

The Project's proposed trip increase (Table 1) matches ITE average rates in the AM peak hour and is lower than ITE in the PM peak hour. However, the traffic study's use of a 25 percent increase in trips is reasonable because it is proportional to Coyote Hill's expansion size, and the number of trips is within the range of observations collected by ITE. The lower rate in the PM peak hour is reasonable because Coyote Hills primarily serves as an open space park.

Both the existing trip generation and forecast growth are relatively modest compared to the adjacent traffic on Paseo Padre Parkway for several reasons. First, the park is largely unprogrammed open space that would not attract an intensity of users compared to City parks with more amenities (e.g., recreational fields). Second, open space park trips more typically occur outside the weekday commute peak or on weekends, whereas typical traffic analysis periods are weekday morning (AM) and afternoon (PM) commute peak hours. Although the park's trip generation may be higher outside the typical peak hours, the park's impact on the surrounding transportation network would be less because the transportation network would be experiencing less overall demand.

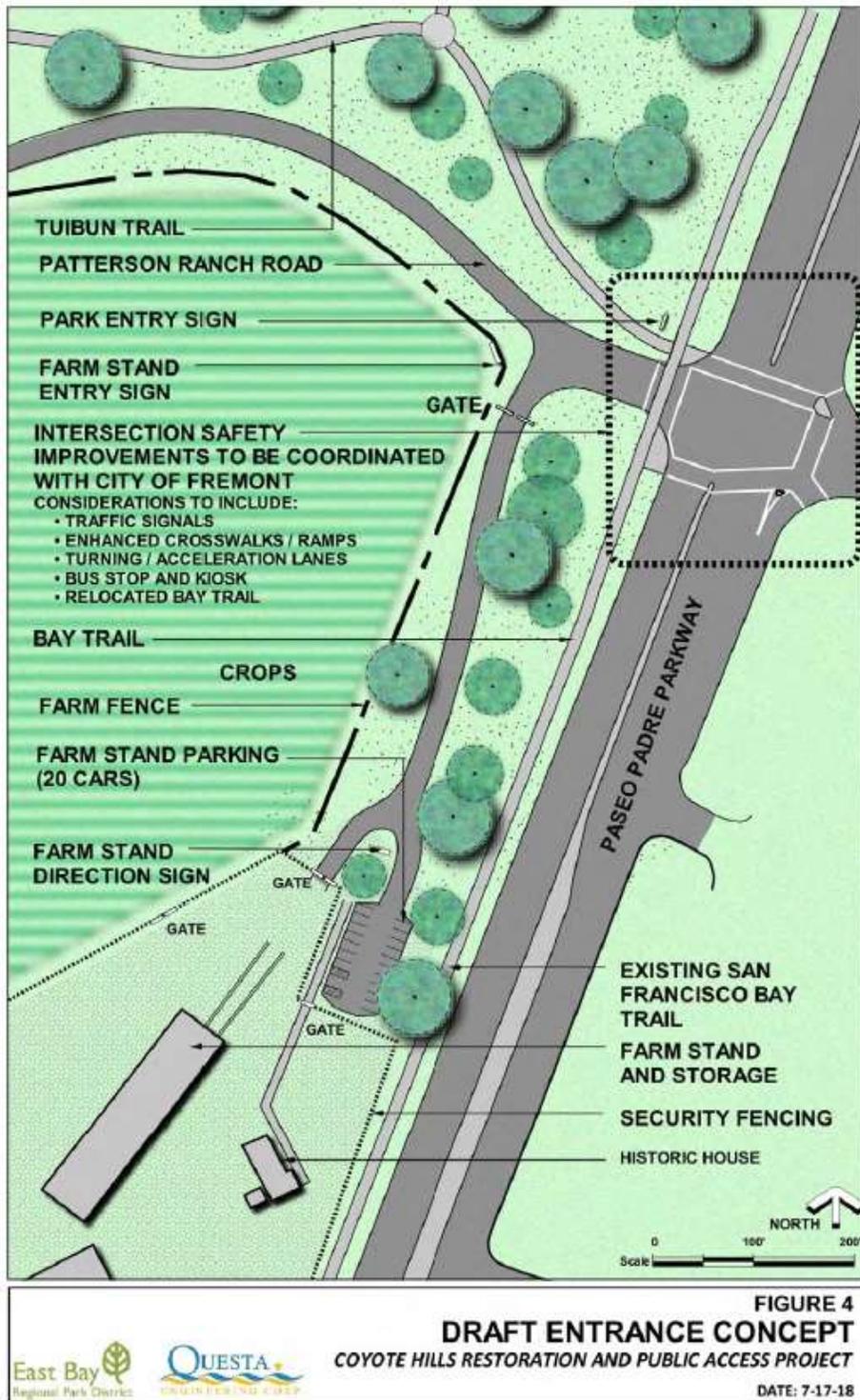


Figure 3 Proposed Project Access Modifications

4 Level of Service (LOS) Methodology

Per the City of Fremont's traffic impact study guidelines, the study intersections were analyzed using methodologies published in the Highway Capacity Manual (HCM), Transportation Research Board, 2000. The HCM 2000 methodology defines intersection performance based on a concept called "level of service." Vehicle delay is a method of quantifying several intangible factors, including driver discomfort, frustration, and lost travel time.

For unsignalized intersections, level-of-service criteria is divided into two intersection types: all-way stop sign-controlled and side-street only stop sign-controlled. All-way stop-controlled intersection level of service is expressed in terms of the average vehicle delay of all the movements. Side-street only stop sign-controlled intersection level-of-service is defined in terms of the average vehicle delay for an individual approach. Typically, the delay of a side-street-only stop sign-controlled intersection applies to the minor approaches because the major approach does not experience any delay. However, individual movement delay thresholds also apply to movements subject to yield control, like permitted left turns from the major-street approach. Table 2 summarizes the level-of-service criteria for unsignalized intersections.

For signalized intersections, level-of-service is measured in terms of the average total vehicle delay of all movements through the intersection. Vehicle delay at a signalized intersection is based variables that include traffic signal phasing, signal cycle length, and traffic volumes with respect to intersection capacity. Table 2 also summarizes the level-of-service criteria for signalized intersections.

Table 2 Intersection Level of Service and Delay Definitions

Level of Service	Description	Signalized Delay	Unsignalized Delay
A	Insignificant	0 to 10 seconds	0 to 10 seconds
B	Minimal	> 10 to 20 seconds	> 10 to 15 seconds
C	Acceptable	> 20 to 35 seconds	> 15 to 25 seconds
D	Tolerable	> 35 to 55 seconds	> 25 to 35 seconds
E	Significant	> 55 to 80 seconds	> 35 to 50 seconds
F	Excessive	> 80 seconds	> 50 seconds

Source: Transportation Resource Board, Highway Capacity Manual, 2000

The City of Fremont's LOS standards define acceptable intersection operations at LOS D or better during peak hours at all city-operated signalized and unsignalized intersections.

5 Existing and Existing plus Project Conditions

This section estimates the vehicle operations at the study intersection under Existing and Existing plus Project conditions, identifies existing access issues for pedestrians and bicyclists, and summarizes collisions recorded since 2007. This section includes a qualitative analysis of the project's impact to regional trip patterns based on the State of California's latest guidance on assessing transportation impacts through Vehicle Miles Traveled (VMT).

5.1 VEHICLE LEVEL OF SERVICE

The Existing conditions scenario estimates the current vehicle delay at the intersection based on the traffic counts collected during the weekday a.m. and p.m. commute peak periods, which includes the existing vehicle traffic generated by the Coyote Hills Regional Park (Figure 2). The Existing plus Project conditions estimate vehicle operations at the study intersection with the addition of vehicle trips associated with the proposed project (Table 1). The Existing and Existing plus Project level of service for the study intersections are summarized in Table 3.

Table 3 Existing Base and plus Project Conditions Intersection Level of Service

Scenario and Approach	Control	AM Peak Hour		PM Peak Hour	
		LOS	Delay	LOS	Delay
Existing					
Westbound Commerce Drive	Stop	C	19.8	E	40.6
Eastbound Patterson Ranch Road	Stop	E	35.7	D	26.1
Existing plus Project					
Westbound Commerce Drive	Stop	C	21.1	E	40.9
Eastbound Patterson Ranch Road	Stop	E	38.8	D	26.2

Under Existing conditions, eastbound Patterson Ranch Road operates at a level of service below the City's LOS "D" threshold during the morning peak hour, while westbound Commerce Drive operates at a deficient LOS during the afternoon peak hour. With the addition of the Project-generated traffic (five total trips in the morning peak hour and nine total trips in the afternoon peak hour), the delay per approach is forecast to increase by approximately three seconds at Patterson Ranch Road, and by less than one second at Commerce Drive. Under Existing and Existing plus Project conditions, the vehicles along Paseo Padre Parkway do not experience delay except when yielding to oncoming traffic when making a left turn.

Actual delays may be higher than those calculated by the Highway Capacity Manual. Vehicles turning left onto Paseo Padre Parkway from the minor street approaches must find gaps in two directions of traffic. This maneuver is particularly challenging when the intersecting traffic is traveling at high speed, since minor street vehicles need a larger time and space gap to clear the intersection and accelerate to the prevailing traffic speed. Vehicle traffic on Paseo Padre

Parkway has been observed traveling above the posted speed limit of 45 MPH. Vehicles unable to find a left-turning gap from the Patterson Ranch Road approach could turn right onto southbound Paseo Padre Parkway. The first opportunity to turn off Paseo Padre Parkway is at Kaiser Drive, a half mile to the south.

5.2 MULTIMODAL ACCESS ISSUES

The following section discusses the existing pedestrian and bicycle facilities at the study intersection, their consistency with the California Manual on Uniform Traffic Control Devices (CA MUTCD) design standards, and elements that would improve safety for all users.

PEDESTRIAN ACCESS

Walking is an increasingly popular way for people to visit Coyote Hills Park. Some park visitors park on Commerce Drive and walk across Paseo Padre Parkway into the park. Employees in the offices east of Paseo Padre Parkway reportedly walk to the Park for recreation throughout the day.

Crosswalks at the intersection of Patterson Ranch Road / Commerce Drive / Paseo Padre Parkway are delineated with transverse pavement markings, i.e., two parallel, 12-inch white lines. The crosswalks do not have pedestrian crossing warning signs in advance of the intersection and at the crossing itself. Although not required at all crosswalks by the CA MUTCD, pedestrian crossing warning signs are recommended at high-speed roadways with more than one lane in each direction. Flashing beacons are recommended when justified by pedestrian and vehicle traffic.

There are curb ramps at all four corners and overhead roadway lights at the northeast and southwest corners. The northeast and southeast corners (Commerce Drive approach) are configured with a channelized right turn lane and a Type C pedestrian passageway. The resulting corner curb radii with the right turn channels are approximately 60 feet. Large corner curb radii typically facilitate fast turns by vehicles.

There are no median refuges for pedestrians crossing Paseo Padre Parkway.

BICYCLE ACCESS

Bicycling to the Park is growing in popularity with the construction of the San Francisco Bay Trail extension. Bicyclists crossing Paseo Padre Parkway experience the same safety issues as pedestrians, as summarized in the previous section.

Along Paseo Padre Parkway, the northbound bike lane at Patterson Ranch Road / Commerce Drive discontinues approximately 280 feet in advance of the intersection. Where the bike lane is discontinued, there is a 150-foot section where a northbound right turn pocket begins. The unmarked area is the intended weaving area for northbound vehicles to cross the bikeway to enter the right turn pocket. The bikeway resumes approximately 130 feet from the intersection.

The northbound bike lane on Paseo Padre Parkway north of the study intersection runs for approximately 130 feet, and then discontinues again for approximately 140 feet; this unmarked area is the weaving area for westbound right turning vehicles to merge onto northbound Paseo Padre Parkway. In the southbound direction on Paseo Padre Parkway, the bike lanes continue up to the intersection and are demarcated with 200 feet of dashed striping.

The bike lanes on Patterson Ranch are generally designed consistently with California Manual on Uniform Traffic Control Devices (CA MUTCD) guidance on bike lanes and right turn pockets (Figure 9C-4). However, the design lacks both required and optional features that would improve the safety for bicyclists traveling next to high speed traffic (>45 MPH). Among the required elements, the northbound weaving areas lack a required sign, R4-4, "BEGIN RIGHT TURN LANE YIELD TO BIKES". Among the optional elements, there are no dashed lines, signs or markings to indicate to weaving traffic the presence of bicycle traffic. A shorter weaving distance, combined with additional pavement markings, could slow vehicle traffic making the weaving maneuver.

5.3 COLLISION HISTORY

Collision data retrieved from the California Highway Patrol Statewide Integrated Traffic Records System (SWITRS) from 2007 to 2017 show seven collisions at this intersection over the past 11 years. Five collisions involved multiple vehicles, one collision involved a vehicle and bicyclist, and one involved one vehicle hitting a fixed object. Of the seven total collisions, five collisions were broadside collisions. All five collisions occurred between one vehicle on Paseo Padre Parkway and another attempting to turn onto or cross Paseo Padre Parkway from the minor street approaches. The single-vehicle collision was faulted to improper turning resulting in hitting a fixed object.

The bicycle collision occurred when a bicyclist crossing Paseo Padre Parkway was hit by a southbound vehicle on Paseo Padre Parkway. There are no recorded pedestrian collisions at the Patterson Ranch Road / Commerce Drive / Paseo Padre Parkway intersection.

5.4 VMT ANALYSIS

California Senate Bill 743 changed the State's guidelines on transportation-related environmental impacts from a level-of-service basis to Vehicle Miles Traveled. VMT measures the amount and distance people drive to a destination. Typically, development projects that are farther from other, complementary land uses (such as a business park far from housing) and in areas without transit or active transportation infrastructure (bike lanes, sidewalks, etc.) generate more driving than development near complementary land uses with more robust transportation options.

The Governor's Office of Planning and Research (OPR) issued a technical advisory on how to apply VMT analysis.¹ The technical advisory does not specifically suggest a VMT threshold for parks, with most of the discussion oriented around residential, office and retail projects.

The most relevant guidance from the technical advisory is for small projects:

Screening Threshold for Small Projects Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact.

The proposed project is estimated to 70 additional daily trips (based on 14 combined AM and PM peak hour trips, and extrapolated by a factor of five), which indicates a less-than significant transportation impact per the Small Projects Screening Threshold.

The OPR guidance on retail uses is also applicable to the proposed project: Parks, like retail uses, typically redistribute recreation trips rather than creating new trips. By adding recreational opportunities into the urban fabric and thereby improving recreational destination proximity, local parks tend to shorten trips and reduce VMT. The project site provides and improves upon the connection to a regional multiuse trail, which allows for non-vehicular access.

For these reasons, the proposed project is not likely to cause a significant impact based on VMT.

¹ State of California, Governor's Office of Planning and Research. (April 2018) "Technical Advisory on Evaluating Transportation Impacts in CEQA." http://opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf

6 Near-Term Base and plus Project Conditions

Future year vehicle traffic forecasts were derived from traffic forecasts reflecting the City of Fremont's General Plan build-out (2035).² The General Plan Traffic Impact Analysis's nearest direct traffic forecasts were for the Paseo Padre Parkway / Ardenwood Boulevard intersection. The traffic at the project study intersection was forecast using the arriving and departing traffic volumes along Paseo Padre Parkway and continuing these trips through the Patterson Ranch Road / Commerce Drive intersection.

Near-Term Base traffic forecasts were modeled by interpolation between the traffic count year (2017) and the build-out (2035) and applying eight years' growth to estimate year 2025 conditions (Figure 4). The Near-Term conditions are assumed to reflect the following projects in the project area that are either under construction or already entitled:

- Four office buildings on Campus Court entitled through the Ardenwood Technology Park Planned District Amendment
- 500 single-family residential lots and associated parks, trails, streets and utilities under construction on the Patterson Ranch Planned District project site
- The planned District Amendment for the Dumbarton Quarry Park

The Near-Term plus Project conditions added the proposed project traffic to the Near-Term Base forecasts. The Near-Term and Near-Term plus Project level of service are summarized in Table 4. The Level of Service calculations are provided in the appendix.

Table 4 Near-Term Base and plus Project Conditions Intersection Level of Service

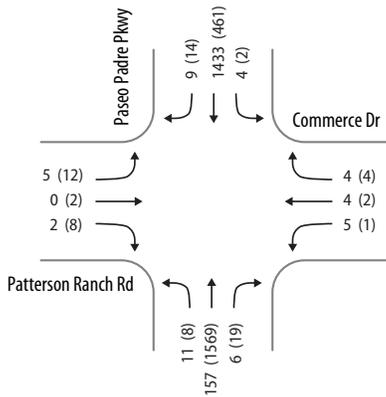
Scenario and Approach	Control	AM Peak Hour		PM Peak Hour	
		LOS	Delay	LOS	Delay
Near-Term Base					
Westbound Commerce Drive	Stop	D	29.0	F	56.7
Eastbound Patterson Ranch Road	Stop	F	57.7	E	41.2
Near-Term plus Project					
Westbound Commerce Drive	Stop	D	31.3	F	57.3
Eastbound Patterson Ranch Road	Stop	F	64.6	E	42.1

² <https://www.fremont.gov/DocumentCenter/View/5813/Appendix-B-web-version?bidId;> Appendix C.

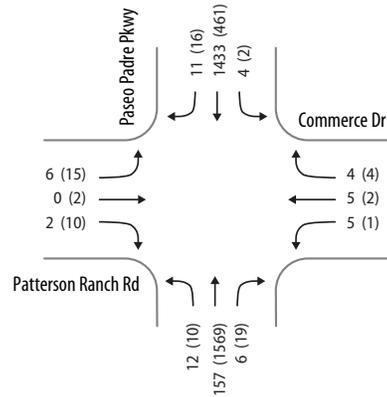
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Under Near-Term Base conditions and Near-Term plus project conditions, Commerce Drive and Patterson Ranch Road are forecast to operate at LOS E or F during the commute peak hours due to increased through-traffic on Paseo Padre Parkway. The forecast delay at the Patterson Ranch Road approach increases by nearly 10 seconds between Near-Term Base and plus Project conditions.

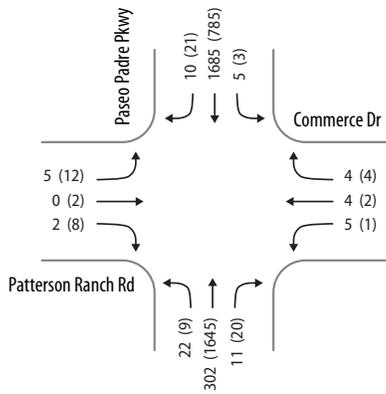
Near-Term Base
Peak Hour Vehicle Volumes



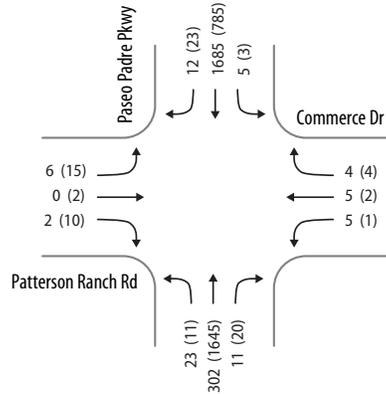
Near-Term Plus Project
Peak Hour Vehicle Volumes



Cumulative Base
Peak Hour Vehicle Volumes



Cumulative Plus Project
Peak Hour Vehicle Volumes



LEGEND: xx AM (xx) PM

Figure 4 – Near-Term / Cumulative Base and plus Project Peak Hour Volumes
Coyote Hills Regional Park Expansion

7 Cumulative Base and plus Project Conditions

As noted in the previous section, Cumulative Base traffic forecasts for Paseo Padre Parkway were derived from adjacent forecasts at the Paseo Padre Parkway / Ardenwood Boulevard intersection. The Cumulative Base plus Project conditions added the proposed project traffic to the Cumulative Base conditions (Figure 4). The Cumulative Base and Cumulative plus Project level of service for the study intersections are summarized in Table 5. The Level of Service calculations are provided in the appendix.

Table 5 Cumulative Base and plus Project Conditions Intersection Level of Service

Scenario and Approach	Control	A.M. Peak Hour		P.M. Peak Hour	
		LOS	Delay	LOS	Delay
Cumulative Base					
Westbound Commerce Drive	Stop	F	54.7	F	101.5
Eastbound Patterson Ranch Road	Stop	F	124.3	F	97.3
Cumulative plus Project					
Westbound Commerce Drive	Stop	F	61.0	F	102.9
Eastbound Patterson Ranch Road	Stop	F	149.7	F	105.3

Under Cumulative Base and Cumulative plus Project conditions, Commerce Drive and Patterson Ranch Road are forecast to operate at LOS F during both the morning and afternoon commute peak hours. The delay is due to increased vehicle through-traffic on Paseo Padre Parkway. The forecast delay at the Patterson Ranch Road approach increases by 25 seconds between Cumulative Base and plus Project conditions.

8 Summary of Impacts and Recommended Improvements

The following section summarizes the deficiencies identified in the traffic analysis and recommends improvements that would mitigate these conditions.

8.1 PROJECT IMPACT

The Patterson Ranch and Commerce Drive approaches at the study intersection are estimated to operate at a deficient LOS, beginning under Existing conditions (LOS "E"), and getting progressively worse with vehicle traffic growth through year 2035 (LOS "F"). Although the delays forecast under Cumulative plus Project conditions at Patterson Ranch Road appear to be extreme, they affect a relatively small number of vehicles (approximately 30 in the peak hour) compared to the through-traffic on Paseo Padre Parkway (approximately 1500 in the peak hour). Under Cumulative plus Project conditions, the project would account for less than one percent of AM peak hour traffic growth ($0.7\% = 5 / (2060-1329)$) and slightly more than one percent ($1.3\% = 9 / (2521-1816)$) of PM peak hour volume growth, or one percent on average.³

The project would add bicycle and pedestrian traffic to the study intersection. Future peak hour bicycle and pedestrian volumes were not forecast because demand is uncertain during the weekday commute peak hour. The proposed estimate of project impact is the percent vehicle traffic impact, or one percent of the projected growth through General Plan build-out.

The City of Fremont's LOS standards define acceptable intersection operations at LOS D or better during peak hours at all city-operated signalized and unsignalized intersections. The project has a potential significant impact because traffic generated by the project would add vehicle traffic to an intersection operating below the City's threshold for acceptable operations. The proposed mitigation for project impact is the project's fair share contribution of one percent toward improvements that would improve access, as described below.

8.2 POTENTIAL VEHICULAR CIRCULATION IMPROVEMENTS

The California Manual on Uniform Traffic Control Devices (CA MUTCD) provides guidance on when conditions justify traffic signals. These studies, or "signal warrants", consider the "traffic conditions, pedestrian characteristics, and physical characteristics of the location... to determine whether installation of a traffic control signal is justified at a particular location" (§4C.01). The analyses for applicable traffic signal warrants and pedestrian beacon warrant are presented in the appendix.

³ Project Contribution = Project Volume / ((Cumulative + Project Volume) – (Existing Volume))

None of the applicable traffic control signal warrants (1, 2, 3 and 4) were met, meaning traffic control signals are not warranted at this intersection. However, the pedestrian hybrid beacon warrant in the CA MUCD was met using counts observed from Saturday, June 24, 2017. Thus, a pedestrian hybrid beacon may be warranted at this intersection, and if considered, should conform to all standards and guidance provided in Chapter 4F of the CA MUTCD.

Mitigation Measure 1, Vehicle Access: To mitigate excessive vehicle traffic delays at the Patterson Ranch Road approach, the City should institute “Right Turn Only” from the Patterson Ranch Road and Commerce Drive approaches during peak commute times. The forecast operations at eastbound Patterson Ranch with the right-turn only requirement are presented in Table 6. Vehicles would have the opportunity to either turn off Paseo Padre Parkway or make a U-turn at adjacent intersections with Ardenwood Boulevard or Kaiser Drive. Traffic signs, striping and raised curbs may be needed to reinforce the right-turn only requirement. The project should contribute its fair share toward to cost of the improvement (one percent).

Table 6 Cumulative plus Project Conditions Intersection Level of Service with Mitigation Measure

Scenario and Approach	Control	A.M. Peak Hour		P.M. Peak Hour	
		LOS	Delay	LOS	Delay
Cumulative plus Project					
Westbound Commerce Drive	Stop	F	61.0	F	102.9
Eastbound Patterson Ranch Road	Stop, Right Turn Only	C	18.7	B	11.7

Note: No improvements proposed for Westbound Commerce Drive (existing condition).

The Right Turn Only requirement should be instituted in addition to the recommended bicycle and pedestrian improvements described below.

8.3 POTENTIAL PEDESTRIAN & BICYCLE CIRCULATION IMPROVEMENTS

Deficiencies in the pedestrian and bicycle environment were summarized in section 5.2 of this report.

Mitigation Measure 2, Bicycle and Pedestrian Access: The following improvements would improve the pedestrian and bicycle access across Paseo Padre Parkway, and are illustrated Figure 5:

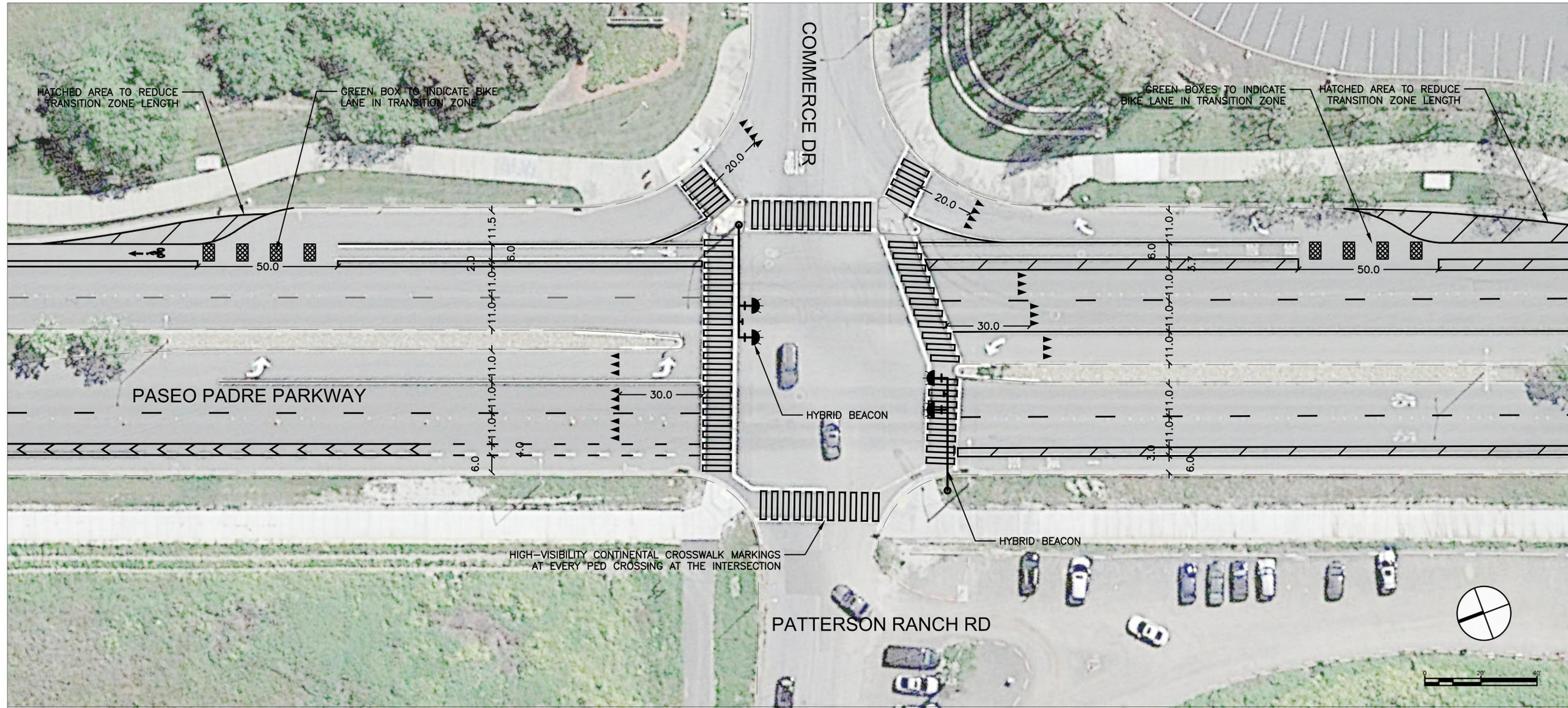
- Narrow the lanes on Paso Padre Parkway from 12 feet to 11 feet.
- Stripe a horizontal buffer between the right-most vehicle lane on northbound and southbound Paso Padre Parkway to provide greater separation between bicyclists and vehicles.
- Shorten the northbound right turn weaving area to slow vehicles before the weaving maneuver and adding green pavement markings to indicate the weaving zone.

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- Install Additional warning signs in advance and at the bicycle-vehicle weaving area and the pedestrian crosswalks.
- Upgrade the crosswalks from transverse markings (two white lines) to continental markings.
- Add yield lines 30 feet in advance of the crosswalks.
- Install a pedestrian hybrid beacon in both directions of Paseo Padre Parkway.

The project should contribute its fair share toward to cost of the improvement (one percent).

The pedestrian hybrid beacon may be installed to allow upgrading to a full traffic signal in the future.



CONCEPTUAL PLAN

SCALE: 1" = 20'

CONCEPTUAL PLAN

Parisi
TRANSPORTATION CONSULTING

1750 Bridgeway, Suite B208
Sausalito, CA 94965
(415) 649-6000

DRAWN: MW
DESIGNED: MW
CHECKED: AL
APPROVED: AL

**EAST BAY REGIONAL PARKS DISTRICT
COYOTE HILLS REGIONAL PARK EIR
COYOTE HILLS/PASEO PADRE PARKWAY SAFETY IMPROVEMENTS**

REVISIONS

NO.	DESCRIPTION	DATE	SCALE
		07/09/2018	1" = 20'
		PTC PROJECT NO.	17003
		DRAWING	P-1
		SHEET NO.	1 OF 1

9 Appendices

Appendix A: Existing Traffic Counts

Appendix B: Collision Records

Collision Details for: Case ID 4676962

Collision Information

County	Alameda
City	Fremont
Date & Time (M/D/Y HH:MM)	04/24/2010 11:08
Location (Intersection)	Paseo Padre Pkwy & Commerce Dr
Dist. & Dir. from Intersection	0.00 ft East
State Highway	No
Latitude & Longitude	37.55551499, -122.06733309

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	East	B - Proceeding Straight

Type of Collision	D - Broadside	Motor Vehicle Involved With	C - Other Motor Vehicle
Collision Severity	4 - Injury (Complaint of Pain)	Pedestrian Accident	No
PCF Violation Category	09 - Automobile Right of Way	Bicycle Accident	No
Weather	A - Clear	Motorcycle Accident	No
Alcohol Involved	No	Truck Accident	No

Victims: 4

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	M - Male	56	4 - Complaint of Pain
1	2 - Passenger	F - Female	52	4 - Complaint of Pain
2	1 - Driver	F - Female	62	4 - Complaint of Pain
2	2 - Passenger	M - Male	70	4 - Complaint of Pain

Collision Details for: Case ID 7204707

Collision Information

County	Alameda
City	Fremont
Date & Time (M/D/Y HH:MM)	02/15/2016 16:51
Location (Intersection)	Paseo Padre Pkwy & Commerce Dr
Dist. & Dir. from Intersection	0.00 ft East
State Highway	No
Latitude & Longitude	37.55549991, -122.06732991

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	West	B - Proceeding Straight

Type of Collision	D - Broadside	Motor Vehicle Involved With	C - Other Motor Vehicle
Collision Severity	3 - Injury (Other Visible)	Pedestrian Accident	No
PCF Violation Category	09 - Automobile Right of Way	Bicycle Accident	No
Weather	A - Clear	Motorcycle Accident	No
Alcohol Involved	No	Truck Accident	No

Victims: 4

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	M - Male	64	4 - Complaint of Pain
2	1 - Driver	F - Female	21	3 - Other Visible Injury
2	2 - Passenger	F - Female	16	4 - Complaint of Pain
2	2 - Passenger	F - Female	1	0 - No Injury

Collision Details for: Case ID 6953387

Collision Information

County	Alameda
City	Fremont
Date & Time (M/D/Y HH:MM)	05/15/2015 15:57
Location (Intersection)	Paseo Padre Pkwy & Commerce Dr
Dist. & Dir. from Intersection	0.00 ft East
State Highway	No
Latitude & Longitude	37.55549991, -122.06732991

Type of Collision	D - Broadside	Motor Vehicle Involved With	C - Other Motor Vehicle
Collision Severity	3 - Injury (Other Visible)	Pedestrian Accident	No
PCF Violation Category	03 - Unsafe Speed	Bicycle Accident	No
Weather	A - Clear	Motorcycle Accident	No
Alcohol Involved	No	Truck Accident	No

Parties: 3

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	West	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	North	B - Proceeding Straight
3	3 - Parked Vehicle	A - Passenger Car/Station Wagon	No	South	O - Parked

Victims: 3

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	M - Male	19	4 - Complaint of Pain
2	1 - Driver	F - Female	29	3 - Other Visible Injury
2	2 - Passenger	M - Male	30	4 - Complaint of Pain

Collision Details for: Case ID 8164767

Collision Information

County	Alameda
City	Fremont
Date & Time (M/D/Y HH:MM)	10/29/2016 21:32
Location (Intersection)	Paseo Padre Pkwy & Commerce Dr
Dist. & Dir. from Intersection	0.00 ft East
State Highway	No
Latitude & Longitude	37.55549991, -122.06732991

Type of Collision	E - Hit Object	Motor Vehicle Involved With	I - Fixed Object
Collision Severity	3 - Injury (Other Visible)	Pedestrian Accident	No
PCF Violation Category	08 - Improper Turning	Bicycle Accident	No
Weather	B - Cloudy	Motorcycle Accident	No
Alcohol Involved	Yes	Truck Accident	No

Parties: 1

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	M - Male	24	3 - Other Visible Injury

Collision Details for: Case ID 8069144

Collision Information

County	Alameda
City	Fremont
Date & Time (M/D/Y HH:MM)	06/13/2016 09:54
Location (Intersection)	Paseo Padre Pkwy & Commerce Dr
Dist. & Dir. from Intersection	0.00 ft East
State Highway	No
Latitude & Longitude	37.55549991, -122.06732991

Type of Collision	H - Other	Motor Vehicle Involved With	G - Bicycle
Collision Severity	3 - Injury (Other Visible)	Pedestrian Accident	No
PCF Violation Category	09 - Automobile Right of Way	Bicycle Accident	Yes
Weather	A - Clear	Motorcycle Accident	No
Alcohol Involved	No	Truck Accident	No

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	4 - Bicyclist	L - Bicycle	Yes	East	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	South	L - Entering Traffic

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	4 - Bicyclist	M - Male	60	3 - Other Visible Injury

Collision Details for: Case ID 8363570

Collision Information

County	Alameda
City	Fremont
Date & Time (M/D/Y HH:MM)	05/04/2017 08:26
Location (Intersection)	Paseo Padre Pkwy & Commerce Dr
Dist. & Dir. from Intersection	0.00 ft East
State Highway	No
Latitude & Longitude	37.55549991, -122.06732991

Type of Collision	D - Broadside	Motor Vehicle Involved With	C - Other Motor Vehicle
Collision Severity	3 - Injury (Other Visible)	Pedestrian Accident	No
PCF Violation Category	09 - Automobile Right of Way	Bicycle Accident	No
Weather	A - Clear	Motorcycle Accident	Yes
Alcohol Involved	No	Truck Accident	No

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	C - Motorcycle/Scooter	Yes	East	E - Making Left Turn
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	North	B - Proceeding Straight

Victims: 2

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	M - Male	38	3 - Other Visible Injury
2	1 - Driver	M - Male	44	3 - Other Visible Injury

Collision Details for: Case ID 8021729

Collision Information

County	Alameda
City	Fremont
Date & Time (M/D/Y HH:MM)	04/03/2016 15:56
Location (Intersection)	Paseo Padre Pkwy & Commerce Dr
Dist. & Dir. from Intersection	0.00 ft East
State Highway	No
Latitude & Longitude	37.55549991, -122.06732991

Type of Collision	D - Broadside	Motor Vehicle Involved With	C - Other Motor Vehicle
Collision Severity	3 - Injury (Other Visible)	Pedestrian Accident	No
PCF Violation Category	09 - Automobile Right of Way	Bicycle Accident	No
Weather	A - Clear	Motorcycle Accident	No
Alcohol Involved	No	Truck Accident	No

Parties: 2

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	North	B - Proceeding Straight
2	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	No	West	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
2	1 - Driver	M - Male	51	3 - Other Visible Injury

Appendix C: LOS Worksheets

HCM Unsignalized Intersection Capacity Analysis

1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

07/10/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	4	55	2	3	1237	8	5	4	4	5	0	2
Future Volume (Veh/h)	4	55	2	3	1237	8	5	4	4	5	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	60	2	3	1345	9	5	4	4	5	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1354			60			748	1428	30	1396	1424	677
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1354			60			748	1428	30	1396	1424	677
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			98	97	100	95	100	99
cM capacity (veh/h)	504			1542			297	133	1038	97	133	395
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	4	30	30	2	3	897	457	13	7			
Volume Left	4	0	0	0	3	0	0	5	5			
Volume Right	0	0	0	2	0	0	9	4	2			
cSH	504	1700	1700	1700	1542	1700	1700	256	124			
Volume to Capacity	0.01	0.02	0.02	0.00	0.00	0.53	0.27	0.05	0.06			
Queue Length 95th (ft)	1	0	0	0	0	0	0	4	4			
Control Delay (s)	12.2	0.0	0.0	0.0	7.3	0.0	0.0	19.8	35.7			
Lane LOS	B				A			C	E			
Approach Delay (s)	0.7				0.0			19.8	35.7			
Approach LOS								C	E			
Intersection Summary												
Average Delay			0.4									
Intersection Capacity Utilization			44.4%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

07/10/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	55	2	3	1237	10	5	5	4	6	0	2
Future Volume (Veh/h)	5	55	2	3	1237	10	5	5	4	6	0	2
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	60	2	3	1345	11	5	5	4	7	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1356			60			750			1432		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1356			60			750			1432		
tC, single (s)	4.1			4.1			7.5			6.5		
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5			4.0		
p0 queue free %	99			100			98			96		
cM capacity (veh/h)	503			1542			296			132		
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	5	30	30	2	3	897	459	14	9			
Volume Left	5	0	0	0	3	0	0	5	7			
Volume Right	0	0	0	2	0	0	11	4	2			
cSH	503	1700	1700	1700	1542	1700	1700	238	115			
Volume to Capacity	0.01	0.02	0.02	0.00	0.00	0.53	0.27	0.06	0.08			
Queue Length 95th (ft)	1	0	0	0	0	0	0	5	6			
Control Delay (s)	12.2	0.0	0.0	0.0	7.3	0.0	0.0	21.1	38.8			
Lane LOS	B			A			C			E		
Approach Delay (s)	0.9			0.0			21.1			38.8		
Approach LOS							C			E		
Intersection Summary												
Average Delay	0.5											
Intersection Capacity Utilization	44.5%			ICU Level of Service			A					
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

07/10/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1516	18	1	237	7	1	2	4	12	2	8
Future Volume (Veh/h)	8	1516	18	1	237	7	1	2	4	12	2	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	1648	20	1	258	8	1	2	4	13	2	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	266			1648			1807	1934	824	1107	1930	133
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	266			1648			1807	1934	824	1107	1930	133
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			98	97	99	92	97	99
cM capacity (veh/h)	1295			388			48	65	316	158	65	892
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	9	824	824	20	1	172	94	7	24			
Volume Left	9	0	0	0	1	0	0	1	13			
Volume Right	0	0	0	20	0	0	8	4	9			
cSH	1295	1700	1700	1700	388	1700	1700	108	195			
Volume to Capacity	0.01	0.48	0.48	0.01	0.00	0.10	0.06	0.06	0.12			
Queue Length 95th (ft)	1	0	0	0	0	0	0	5	10			
Control Delay (s)	7.8	0.0	0.0	0.0	14.3	0.0	0.0	40.6	26.1			
Lane LOS	A				B			E	D			
Approach Delay (s)	0.0				0.1			40.6	26.1			
Approach LOS								E	D			
Intersection Summary												
Average Delay			0.5									
Intersection Capacity Utilization			52.1%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

07/10/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1516	18	1	237	9	1	2	4	15	2	10
Future Volume (Veh/h)	10	1516	18	1	237	9	1	2	4	15	2	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	1648	20	1	258	10	1	2	4	16	2	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	268			1648			1813	1940	824	1112	1935	134
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	268			1648			1813	1940	824	1112	1935	134
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			98	97	99	90	97	99
cM capacity (veh/h)	1293			388			47	64	316	156	64	890
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	11	824	824	20	1	172	96	7	29			
Volume Left	11	0	0	0	1	0	0	1	16			
Volume Right	0	0	0	20	0	0	10	4	11			
cSH	1293	1700	1700	1700	388	1700	1700	107	199			
Volume to Capacity	0.01	0.48	0.48	0.01	0.00	0.10	0.06	0.07	0.15			
Queue Length 95th (ft)	1	0	0	0	0	0	0	5	13			
Control Delay (s)	7.8	0.0	0.0	0.0	14.3	0.0	0.0	40.9	26.2			
Lane LOS	A				B			E	D			
Approach Delay (s)	0.1				0.1			40.9	26.2			
Approach LOS								E	D			
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			53.0%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

07/11/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	157	6	4	1433	9	5	4	4	5	0	2
Future Volume (Veh/h)	11	157	6	4	1433	9	5	4	4	5	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	171	7	4	1558	10	5	4	4	5	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1568			171			984	1771	86	1682	1766	784
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1568			171			984	1771	86	1682	1766	784
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			97	95	100	91	100	99
cM capacity (veh/h)	417			1404			197	80	956	57	80	336
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	12	86	86	7	4	1039	529	13	7			
Volume Left	12	0	0	0	4	0	0	5	5			
Volume Right	0	0	0	7	0	0	10	4	2			
cSH	417	1700	1700	1700	1404	1700	1700	163	75			
Volume to Capacity	0.03	0.05	0.05	0.00	0.00	0.61	0.31	0.08	0.09			
Queue Length 95th (ft)	2	0	0	0	0	0	0	6	7			
Control Delay (s)	13.9	0.0	0.0	0.0	7.6	0.0	0.0	29.0	57.7			
Lane LOS	B				A			D	F			
Approach Delay (s)	0.9				0.0			29.0	57.7			
Approach LOS								D	F			
Intersection Summary												
Average Delay			0.5									
Intersection Capacity Utilization			49.9%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

07/11/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	157	6	4	1433	11	5	5	4	6	0	2
Future Volume (Veh/h)	12	157	6	4	1433	11	5	5	4	6	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	171	7	4	1558	12	5	5	4	7	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1570			171			986	1775	86	1686	1769	785
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1570			171			986	1775	86	1686	1769	785
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			97	94	100	88	100	99
cM capacity (veh/h)	416			1404			196	79	956	56	80	336
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	13	86	86	7	4	1039	531	14	9			
Volume Left	13	0	0	0	4	0	0	5	7			
Volume Right	0	0	0	7	0	0	12	4	2			
cSH	416	1700	1700	1700	1404	1700	1700	151	69			
Volume to Capacity	0.03	0.05	0.05	0.00	0.00	0.61	0.31	0.09	0.13			
Queue Length 95th (ft)	2	0	0	0	0	0	0	8	11			
Control Delay (s)	13.9	0.0	0.0	0.0	7.6	0.0	0.0	31.3	64.6			
Lane LOS	B				A			D	F			
Approach Delay (s)	0.9				0.0			31.3	64.6			
Approach LOS								D	F			
Intersection Summary												
Average Delay			0.7									
Intersection Capacity Utilization			50.0%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

07/11/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1569	19	2	461	14	1	2	4	12	2	8
Future Volume (Veh/h)	8	1569	19	2	461	14	1	2	4	12	2	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	1705	21	2	501	15	1	2	4	13	2	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	516			1705			1988	2243	852	1384	2236	258
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	516			1705			1988	2243	852	1384	2236	258
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			97	95	99	87	95	99
cM capacity (veh/h)	1046			369			34	41	303	97	41	741
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	9	852	852	21	2	334	182	7	24			
Volume Left	9	0	0	0	2	0	0	1	13			
Volume Right	0	0	0	21	0	0	15	4	9			
cSH	1046	1700	1700	1700	369	1700	1700	77	123			
Volume to Capacity	0.01	0.50	0.50	0.01	0.01	0.20	0.11	0.09	0.19			
Queue Length 95th (ft)	1	0	0	0	0	0	0	7	17			
Control Delay (s)	8.5	0.0	0.0	0.0	14.8	0.0	0.0	56.7	41.2			
Lane LOS	A				B			F	E			
Approach Delay (s)	0.0				0.1			56.7	41.2			
Approach LOS								F	E			
Intersection Summary												
Average Delay			0.7									
Intersection Capacity Utilization			53.6%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

07/11/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1569	19	2	461	16	1	2	4	15	2	10
Future Volume (Veh/h)	10	1569	19	2	461	16	1	2	4	15	2	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	1705	21	2	501	17	1	2	4	16	2	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	518			1705			1994	2249	852	1389	2240	259
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	518			1705			1994	2249	852	1389	2240	259
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			97	95	99	83	95	99
cM capacity (veh/h)	1044			369			33	40	303	96	41	740
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	11	852	852	21	2	334	184	7	29			
Volume Left	11	0	0	0	2	0	0	1	16			
Volume Right	0	0	0	21	0	0	17	4	11			
cSH	1044	1700	1700	1700	369	1700	1700	76	126			
Volume to Capacity	0.01	0.50	0.50	0.01	0.01	0.20	0.11	0.09	0.23			
Queue Length 95th (ft)	1	0	0	0	0	0	0	7	21			
Control Delay (s)	8.5	0.0	0.0	0.0	14.8	0.0	0.0	57.3	42.1			
Lane LOS	A				B			F	E			
Approach Delay (s)	0.1				0.1			57.3	42.1			
Approach LOS								F	E			
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utilization			54.5%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

07/12/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑	↘	↗	↑↑			↕			↕	
Traffic Volume (veh/h)	23	302	11	5	1685	12	5	5	4	6	0	2
Future Volume (Veh/h)	23	302	11	5	1685	12	5	5	4	6	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	328	12	5	1832	13	5	5	4	7	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None					None						
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1845			328			1306	2233	164	2065	2226	922
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1845			328			1306	2233	164	2065	2226	922
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	92			100			95	87	100	74	100	99
cM capacity (veh/h)	325			1228			109	39	852	27	39	272
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	25	164	164	12	5	1221	624	14	9			
Volume Left	25	0	0	0	5	0	0	5	7			
Volume Right	0	0	0	12	0	0	13	4	2			
cSH	325	1700	1700	1700	1228	1700	1700	78	33			
Volume to Capacity	0.08	0.10	0.10	0.01	0.00	0.72	0.37	0.18	0.27			
Queue Length 95th (ft)	6	0	0	0	0	0	0	15	22			
Control Delay (s)	17.0	0.0	0.0	0.0	7.9	0.0	0.0	61.0	149.7			
Lane LOS	C				A			F	F			
Approach Delay (s)	1.2				0.0			61.0	149.7			
Approach LOS								F	F			
Intersection Summary												
Average Delay			1.2									
Intersection Capacity Utilization			57.0%		ICU Level of Service				B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

07/10/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	302	11	5	1685	10	5	4	4	5	0	2
Future Volume (Veh/h)	22	302	11	5	1685	10	5	4	4	5	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	328	12	5	1832	11	5	4	4	5	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1843			328			1304	2229	164	2062	2224	922
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1843			328			1304	2229	164	2062	2224	922
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	93			100			95	90	100	82	100	99
cM capacity (veh/h)	326			1228			110	39	852	27	39	272
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	24	164	164	12	5	1221	622	13	7			
Volume Left	24	0	0	0	5	0	0	5	5			
Volume Right	0	0	0	12	0	0	11	4	2			
cSH	326	1700	1700	1700	1228	1700	1700	85	37			
Volume to Capacity	0.07	0.10	0.10	0.01	0.00	0.72	0.37	0.15	0.19			
Queue Length 95th (ft)	6	0	0	0	0	0	0	13	15			
Control Delay (s)	16.9	0.0	0.0	0.0	7.9	0.0	0.0	54.7	124.3			
Lane LOS	C				A			F	F			
Approach Delay (s)	1.1				0.0			54.7	124.3			
Approach LOS								F	F			
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			56.9%		ICU Level of Service				B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

07/10/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	1645	20	3	785	23	1	2	4	15	2	10
Future Volume (Veh/h)	11	1645	20	3	785	23	1	2	4	15	2	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	1788	22	3	853	25	1	2	4	16	2	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	878			1788			2256	2696	894	1790	2684	439
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	878			1788			2256	2696	894	1790	2684	439
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			99			95	90	99	65	90	98
cM capacity (veh/h)	765			342			20	21	284	46	21	566
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	12	894	894	22	3	569	309	7	29			
Volume Left	12	0	0	0	3	0	0	1	16			
Volume Right	0	0	0	22	0	0	25	4	11			
cSH	765	1700	1700	1700	342	1700	1700	44	62			
Volume to Capacity	0.02	0.53	0.53	0.01	0.01	0.33	0.18	0.16	0.46			
Queue Length 95th (ft)	1	0	0	0	1	0	0	13	45			
Control Delay (s)	9.8	0.0	0.0	0.0	15.6	0.0	0.0	102.9	105.3			
Lane LOS	A				C			F	F			
Approach Delay (s)	0.1				0.1			102.9	105.3			
Approach LOS								F	F			
Intersection Summary												
Average Delay			1.4									
Intersection Capacity Utilization			56.6%		ICU Level of Service				B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

07/10/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	1645	20	3	785	21	1	2	4	12	2	8
Future Volume (Veh/h)	9	1645	20	3	785	21	1	2	4	12	2	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	1788	22	3	853	23	1	2	4	13	2	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	876			1788			2250	2690	894	1786	2678	438
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	876			1788			2250	2690	894	1786	2678	438
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			95	90	99	72	91	98
cM capacity (veh/h)	766			342			20	21	284	46	21	567
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	10	894	894	22	3	569	307	7	24			
Volume Left	10	0	0	0	3	0	0	1	13			
Volume Right	0	0	0	22	0	0	23	4	9			
cSH	766	1700	1700	1700	342	1700	1700	44	61			
Volume to Capacity	0.01	0.53	0.53	0.01	0.01	0.33	0.18	0.16	0.39			
Queue Length 95th (ft)	1	0	0	0	1	0	0	13	37			
Control Delay (s)	9.8	0.0	0.0	0.0	15.6	0.0	0.0	101.5	97.3			
Lane LOS	A				C			F	F			
Approach Delay (s)	0.1				0.1			101.5	97.3			
Approach LOS								F	F			
Intersection Summary												
Average Delay			1.2									
Intersection Capacity Utilization			55.7%		ICU Level of Service				B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

02/07/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	23	302	11	5	1685	12	5	5	4	0	0	8	
Future Volume (Veh/h)	23	302	11	5	1685	12	5	5	4	0	0	8	
Sign Control		Free			Free			Stop			Stop		
Grade		0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	25	328	12	5	1832	13	5	5	4	0	0	9	
Pedestrians													
Lane Width (ft)	Eastbound Patterson Ranch Road approach												
Walking Speed (ft/s)	Eastbound Patterson Ranch Road approach												
Percent Blockage	Eastbound Patterson Ranch Road approach												
Right turn flare (veh)	Eastbound Patterson Ranch Road approach												
Median type	None					None							
Median storage (veh)													
Upstream signal (ft)													
pX, platoon unblocked													
vC, conflicting volume	1845			328			1313	2233	164	2065	2226	922	
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	1845			328			1313	2233	164	2065	2226	922	
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9	
tC, 2 stage (s)													
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3	
p0 queue free %	92			100			95	87	100	100	100	97	
cM capacity (veh/h)	325			1228			105	39	852	27	39	272	
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	25	164	164	12	5	1221	624	14	9				
Volume Left	25	0	0	0	5	0	0	5	0				
Volume Right	0	0	0	12	0	0	13	4	9				
cSH	325	1700	1700	1700	1228	1700	1700	77	272				
Volume to Capacity	0.08	0.10	0.10	0.01	0.00	0.72	0.37	0.18	0.03				
Queue Length 95th (ft)	6	0	0	0	0	0	0	15	3				
Control Delay (s)	17.0	0.0	0.0	0.0	7.9	0.0	0.0	61.7	18.7				
Lane LOS	C				A			F	C				
Approach Delay (s)	1.2				0.0			61.7	18.7				
Approach LOS								F	C				
Intersection Summary													
Average Delay	0.7												
Intersection Capacity Utilization	58.8%			ICU Level of Service						B			
Analysis Period (min)	15												

HCM Unsignalized Intersection Capacity Analysis

1: Commerce Dr /Patterson Ranch Rd & Paseo Padre Pkwy

02/07/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	1645	20	3	785	23	1	2	4	0	0	27
Future Volume (Veh/h)	11	1645	20	3	785	23	1	2	4	0	0	27
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	1788	22	3	853	25	1	2	4	0	0	29
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	878			1788			2274	2696	894	1790	2684	439
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	878			1788			2274	2696	894	1790	2684	439
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			99			95	90	99	100	100	95
cM capacity (veh/h)	765			342			20	21	284	46	21	566
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1			
Volume Total	12	894	894	22	3	569	309	7	29			
Volume Left	12	0	0	0	3	0	0	1	0			
Volume Right	0	0	0	22	0	0	25	4	29			
cSH	765	1700	1700	1700	342	1700	1700	44	566			
Volume to Capacity	0.02	0.53	0.53	0.01	0.01	0.33	0.18	0.16	0.05			
Queue Length 95th (ft)	1	0	0	0	1	0	0	13	4			
Control Delay (s)	9.8	0.0	0.0	0.0	15.6	0.0	0.0	102.5	11.7			
Lane LOS	A				C			F	B			
Approach Delay (s)	0.1				0.1			102.5	11.7			
Approach LOS								F	B			
Intersection Summary												
Average Delay			0.4									
Intersection Capacity Utilization			55.5%		ICU Level of Service				B			
Analysis Period (min)			15									

Eastbound Patterson Ranch Road approach

Appendix D: Traffic Signal Warrant Analysis

Table A1: Warrant 1 & 2, Paseo Padre Parkway / Patterson Ranch Road / Commerce Drive

June 23, 2017 Hour Starting	Paseo Padre Parkway (Major) 2-way Total	Patterson Ranch Road (Minor 1)	Commerce Drive (Minor 2)	Warrant 1 Eight-Hour			Warrant 2 Four-Hour
				Condition A Satisfied? (70%)	Condition B Satisfied? (70%)	Both Condition A and B Satisfied? (56%)	
6:00 AM	1007	4	6	No	No	No	No
7:00 AM	1320	4	8	No	No	No	No
8:00 AM	1203	11	16	No	No	No	No
9:00 AM	878	19	16	No	No	No	No
10:00 AM	474	23	17	No	No	No	No
11:00 AM	367	20	7	No	No	No	No
12:00 PM	425	19	13	No	No	No	No
1:00 PM	534	13	17	No	No	No	No
2:00 PM	858	10	6	No	No	No	No
3:00 PM	1438	12	8	No	No	No	No
4:00 PM	1702	16	9	No	No	No	No
5:00 PM	1724	9	10	No	No	No	No
6:00 PM	1512	15	14	No	No	No	No
7:00 PM	788	23	13	No	No	No	No
8:00 PM	422	19	12	No	No	No	No
Warrant Satisfied?				No			No

Counts from Friday, June 23, 2017.

Warrant 3 is automatically not satisfied if traffic volumes fail to satisfy Warrant 1 or 2 for a single peak hour.

Table A2: Warrant 1 & 2, Paseo Padre Parkway / Patterson Ranch Road / Commerce Drive

June 24, 2017 Hour Starting	Paseo Padre Parkway (Major) 2-way Total	Patterson Ranch Road (Minor 1)	Commerce Drive (Minor 2)	Warrant 1 Eight-Hour			Warrant 2 Four-Hour
				Condition A Satisfied? (70%)	Condition B Satisfied? (70%)	Both Condition A and B Satisfied? (56%)	
10:00 AM	375	37	20	No	No	No	No
11:00 AM	395	47	10	No	No	No	No
12:00 PM	477	29	5	No	No	No	No
1:00 PM	538	28	14	No	No	No	No
2:00 PM	555	20	16	No	No	No	No
3:00 PM	509	23	11	No	No	No	No
4:00 PM	538	21	11	No	No	No	No
5:00 PM	488	25	14	No	No	No	No
6:00 PM	459	25	11	No	No	No	No
7:00 PM	334	37	7	No	No	No	No
Warrant Satisfied?				No	No	No	No

Counts from Saturday, June 24, 2017.

Warrant 3 is automatically not satisfied if traffic volumes fail to satisfy Warrant 1 or 2 for a single peak hour.

Table A3: Warrant 4 (Condition A), Paseo Padre Parkway / Patterson Ranch Road / Commerce Drive

Paseo Padre Parkway (Major) Total of All Crossings			Warrant 4 Condition A: Pedestrian Four-Hour	
Hour Starting	Pedestrian Crossing June 23, 2017	Pedestrian Crossing June 24, 2017	Condition A Satisfied? (70%)	Condition B Satisfied? (70%)
7:00 AM	6	34	No	No
8:00 AM	5	41	No	No
9:00 AM	3	54	No	No
10:00 AM	4	28	No	No
11:00 AM	6	17	No	No
5:00 PM	8	10	No	No
6:00 PM	0	14	No	No
7:00 PM	7	8	No	No
8:00 PM	3	12	No	No
Warrant Satisfied?			No	No

Table A4: Warrant 4 (Condition B), Paseo Padre Parkway / Patterson Ranch Road / Commerce Drive

Paseo Padre Parkway (Major) Total of All Crossings and Approaches					Warrant 4 Condition B: Pedestrian Peak-Hour	
Hour Starting	Vehicular Volume Total June 23, 2017	Pedestrian Crossing June 23, 2017	Vehicular Volume Total June 24, 2017	Pedestrian Crossing June 24, 2017	Condition A Satisfied? (70%)	Condition B Satisfied? (70%)
7:00 AM	1320	6	191	34	No	No
7:15 AM	1281	5	222	46	No	No
7:30 AM	1233	5	250	50	No	No
7:45 AM	1257	6	282	43	No	No
8:00 AM	1203	5	284	41	No	No
8:15 AM	1169	3	302	49	No	No
8:30 AM	1114	3	325	48	No	No
8:45 AM	981	1	326	54	No	No
9:00 AM	878	3	327	54	No	No
9:15 AM	760	2	326	34	No	No
9:30 AM	621	2	319	30	No	No
9:45 AM	538	3	339	28	No	No
10:00 AM	474	4	375	28	No	No
10:15 AM	427	5	387*	28*	No	No
10:30 AM	389	6	405	27	No	No
10:45 AM	381	8	414	22	No	No
11:00 AM	367	6	395	17	No	No
5:45 PM	1568	2	458	13	No	No
6:00 PM	1512	0	459	14	No	No
6:15 PM	1348	1	451	10	No	No
7:15 PM	661	8	303	11	No	No
7:30 PM	598	7	291	17	No	No
7:45 PM	528	5	287	16	No	No
Warrant Satisfied?					No	No

*Volumes used in the Pedestrian Hybrid Beacon Warrant (Figure 5).

Pedestrian Hybrid Beacon Warrant

The CA MUTCD Pedestrian Hybrid Beacon Warrant (Figure 6) dictates that a Pedestrian Hybrid Beacon may be considered at a location where the major street speed exceeds 35 mph when the plotted point of the single highest peak-hour of an average day is plotted above the curve in the Figure 5 below.

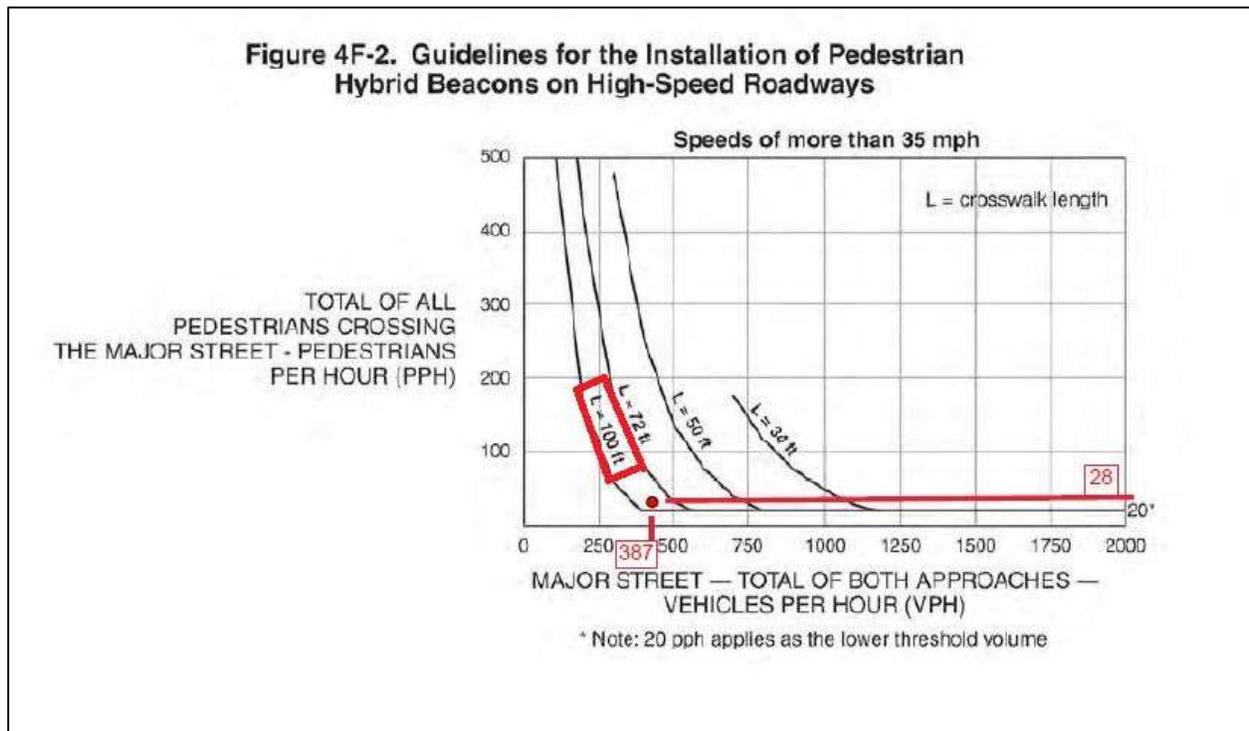


Figure 6 CA MUTCD Pedestrian Hybrid Beacon Warrant

The crosswalk length across Paseo Padre Parkway is 90 feet from the pork-chop island to the far curb ramp. Figure 5 shows the plotted point of one peak-hour, from the Saturday observed, that falls above the applicable curve (using the curve for a 100-foot crosswalk). The plotted point used, from Table A4, represents the peak-hour starting from 10:15 AM where the total vehicular counts on Paseo Padre Parkway and total pedestrians which crossed the major street were 387 and 28, respectively. Thus, the existing pedestrian and traffic volumes for the observed Saturday meet the standards for the Pedestrian Hybrid Beacon Warrant.

Appendix D

EBRPD Guidelines for Protecting Parkland Archaeological Sites

EBRPD GUIDELINES FOR PROTECTING
PARKLAND ARCHAEOLOGICAL SITES

Background

I. The District's Master Plan mandates preservation of prehistoric resources on lands owned or operated by the District. "The District will preserve cultural resources 'in situ' wherever feasible. After consulting with recognized authorities and groups, the Board will adopt a reinterment plan for the remains of Native Americans and their associated artifacts."

II. Ordinance #38

ARCHAEOLOGICAL FEATURES. No person shall damage, injure, collect or remove, any object of paleontological, archaeological or historical interest or value located on District parklands. In addition, any person who willfully injures an object of archaeological or historical interest or value or enters a fenced and posted archaeological site shall be arrested or issued a citation pursuant to Penal code Section 622-1/2.

III. State Law

Native American graves and artifacts. Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location is guilty of a misdemeanor. State law prohibits any person from obtaining or possessing any Native American artifacts or human remains taken from a Native American grave or cairn on or after January 1, 1984.

It is a felony punishable by imprisonment in the state prison for any person to knowingly or willfully obtain or possess any Native American artifacts or human remains taken from a Native American grave or cairn after January 1, 1988, except as otherwise provided by law.

SECTION 1. Section 7050.5 of the Health and Safety Code

7050.5 (a) Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in Section 5097.99 of the Public Resources Code. The provisions of this subdivision shall not apply to any person carrying out an agreement developed pursuant to subdivision (1) of Section 5097.94 of the Public Resources Code or to any person authorized to implement Section 5097.98 of the Public Resources Code.

(b) In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part

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3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

(c) If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

SEC. 2 Section 5097.99 of the Public Resources Code is amended to read:

5097.99. (a) No person shall obtain or possess any Native American artifacts or human remains which are taken from a Native American grave or cairn on or after January 1, 1984, except as otherwise provided by law or in accordance with an agreement reached pursuant to subdivision (1) of Section 5097.94 or pursuant to Section 5097.98.

(b) Any person who knowingly or willfully obtains or possesses any Native American artifacts or human remains which are taken from a Native American grave or cairn after January 1, 1988, except as otherwise provided by law or in accordance with an agreement reached pursuant to subdivision (1) of Section 5097.94 or pursuant to Section 5097.98, is guilty of a felony which is punishable by imprisonment in the state prison.

IV. EBRPD Operational Guidelines

- A. O&I managers and supervisors will follow the archaeological site operations and protection procedures and mitigations prescribed in any adopted LUDP/EIR or interim use plan for parks under their control.
- B. For parks without LUDP/EIR's, O&I managers and supervisors will identify known archaeological sites, and will conduct park operations in a manner to avoid disturbance of known features. In the event disturbance is unavoidable for any project, we will comply with the District's CEQA process prior to project initiation.

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- C. Identified Native American sites will be zoned as special protection units in the O&I resource mapping project, and will be preserved and managed in their natural condition. A minimum 50' buffer will be established around each known site to ensure that encroachments will not desecrate burials or damage artifacts. If a new site is discovered within a developed area, the District, in consultation with local descendents and a qualified archaeologist, will develop special operational guidelines to protect the site and to regulate and control digging, trenching, grading or other activities. Any digging or trenching in or near a known site where human remains might be present will be done with a local designated Native American observer present.
- D. The District will respect the native religious and cultural rights of Ohlone, Yokut, and Miwok descendents. The District will consult with the most likely living descendents recommended by the California Native American Heritage Commission on all matters of:
1. How best to protect the site.
 2. How best to keep certain sites secret, to decide which sites are appropriate to interpret, and how to involve descendents in telling the Ohlone, Yokut, and Miwok story.
 3. How to comply with the wishes of local descendents on matters of religious and cultural beliefs.
 4. How to handle the protection and the dignified reinterment of human remains, and other personal items associated with burials.
 5. How to protect, preserve, catalog, and present for educational purposes any appropriate artifacts found at the park.
 6. How, if, and when any scientific inquiry is appropriate or advisable at the site or involving any disturbed human remains or features. The District will not generally allow archaeological digs to occur on identified sites.

E. Reinterment Plan Policies

The specific plan for reinterment of human remains and associated burial objects found on District lands will be decided in consultation with the most likely descendents of each tribe for a park site using the following policies:

1. Remains and objects removed from a parkland or disturbed during construction will be reinterred at an appropriate site close to the original burial.

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2. The District will cooperate with descendents in returning burial remains that were excavated in archaeological digs prior to District ownership of the parkland.
 3. The reinterment site will be documented in an appropriate fashion, i.e., either a secret site or a public site for educational purposes.
- F. Other identified archaeological sites (other than Native American Indian) will also be zoned as special protection units in the O&I resource mapping project, and will be preserved and protected as features of the park. A minimum 50' buffer will be established around the site to ensure protection of the resource being preserved. The District, in consultation with qualified scientists from the appropriate disciplines, will develop a specific written plan for preserving the site and for determining whether or not further archaeological or scientific discovery is warranted on a representative portion of the site. The Board of Directors, after complying with CEQA, will approve any work that would result in disturbance of the resource.

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