

PUBLIC REVIEW DRAFT

**CEQA INITIAL STUDY/MITIGATED
NEGATIVE DECLARATION**

HIDDENBROOKE PARK PROJECT

VALLEJO, CALIFORNIA

Prepared for:

City of Vallejo
555 Santa Clara Street
Vallejo, California 94590

Prepared by:

LSA Associates, Inc.
157 Park Place
Point Richmond, California 94801
(510) 236-6810

LSA Project No.CEN1201

LSA

March 2013

MITIGATED NEGATIVE DECLARATION

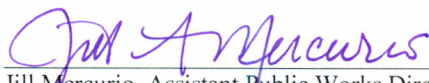
Project Name. Hiddenbrooke Park Project

Project Location. The project site is located at the southern end of the Hiddenbrooke residential development in northeastern Vallejo, Solano County, California. Vehicular access to the site is from the I-80/Hiddenbrooke Parkway interchange via Hiddenbrooke Parkway, Bennington Drive, Landmark Drive and Alder Creek Road. The project site is located at the southern terminus of Alder Creek Road.

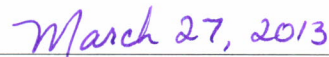
Project Description. The City of Vallejo (City) proposes to develop a neighborhood park to serve the Hiddenbrooke community. The proposed park project would encompass a total of approximately 3.2 acres and involve the following park amenities: an open turf area, play areas and structures for school and preschool-age children, a water play feature, restroom building, covered picnic shelters, a half basketball court, two Bocce courts, a new pedestrian path loop through the orchard lands to the south and a hiking access trail to the Eastern Swett Ranch property. A paved automobile parking area and a gravel-paved equestrian parking area would also be provided.

Findings. It is hereby determined that, based on the information contained in the attached Initial Study, the project would not have a significant adverse effect on the environment.

Mitigation measures, necessary to avoid potentially significant effects on the environment, are included in the attached Initial Study, which is hereby incorporated and fully made part of this Mitigated Negative Declaration. The City of Vallejo has hereby agreed to implement each of the identified mitigation measures, which would be adopted as part of the Mitigation Monitoring and Reporting Program.



Jill Mercurio, Assistant Public Works Director/City Engineer
City of Vallejo Department of Public Works



Date

TABLE OF CONTENTS

MITIGATED NEGATIVE DECLARATION	i
ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED	7
EVALUATION OF ENVIRONMENTAL IMPACTS	8
ENVIRONMENTAL CHECKLIST	9
I. AESTHETICS.	9
II. AGRICULTURAL AND FOREST RESOURCES.	11
III. AIR QUALITY.....	14
IV. BIOLOGICAL RESOURCES.....	18
V. CULTURAL RESOURCES.....	28
VI. GEOLOGY AND SOILS.....	31
VII. GREENHOUSE GAS EMISSIONS.....	35
VIII. HAZARDS.....	37
IX. HYDROLOGY AND WATER QUALITY.....	41
X. LAND USE AND PLANNING.....	46
XI. MINERAL RESOURCES.....	49
XII. NOISE.....	50
XIII. POPULATION AND HOUSING.....	54
XIV. PUBLIC SERVICES.....	55
XV. RECREATION.....	57
XVI. TRANSPORTATION/TRAFFIC.....	59
XVII. UTILITIES AND SERVICE SYSTEMS.....	62
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.....	65
REPORT PREPARERS AND REFERENCES.....	67

FIGURES

Figure 1: Regional Location.....	4
Figure 2: Project Site Location.....	5
Figure 3: Proposed Project	6

1. **Project title:**
Hiddenbrooke Park Project
2. **Lead agency name and address:**
City of Vallejo
555 Santa Clara Street
Vallejo, CA 94590
3. **Contact person and phone number:**
Jill Mercurio, Assistant Public Works Director/City Engineer
(707) 648-5251
4. **Project location:**
The project site is located at the southern end of the Hiddenbrooke residential development in northeastern Vallejo, Solano County, California. Vehicular access to the site is from the I-80/Hiddenbrooke Parkway interchange via Hiddenbrooke Parkway, Bennington Drive, Landmark Drive and Alder Creek Road. The project site is located at the southern terminus of Alder Creek Road. Figures 1 and 2 illustrate the regional and project site locations, respectively.
5. **Project sponsor's name and address:**
City of Vallejo
Department of Public Works
555 Santa Clara Street
Vallejo, CA 94590
6. **General plan designation:** Agriculture and Open Space Preservation
7. **Zoning:** Mixed Use Planned Development
8. **Description of project:**
The City of Vallejo (City) proposes to develop a neighborhood park to serve the Hiddenbrooke community, providing a much-needed recreation amenity and publically-accessible green space for the community. The approximately 3.2 acre project involves a variety of park amenities including: an open turf area, play areas and structures for school- and preschool-age children, a water play feature, restroom building, covered picnic shelters, a half basketball court, and two Bocce courts. A pedestrian path loop would be constructed through the existing orchard to the south to allow for passive recreational opportunities (e.g., wildlife viewing, walking, etc.). In addition, a trailhead and associated access trail segment would be constructed to facilitate future hiking access to the Eastern Swett Ranch.

A paved automobile parking area is proposed to accommodate twenty cars. Drive aisles in the proposed parking area would be paved with permeable material. A fenced, gravel-paved, equestrian parking area would also be provided. This area would be sized to accommodate up to three trucks with trailers and would also allow for truck turnaround. A new, unpaved equestrian/emergency vehicle access route would be constructed to connect the equestrian parking area to the existing ranch road south of the proposed project and to the adjacent Eastern

Swett Ranch. Gates would be installed at the parking entries and the developed portion of the park would have a perimeter fence.

Similar to other public parks in Vallejo, the proposed park would be closed to the public from dusk to dawn. Gates at the park entries and perimeter fencing would prohibit public access after hours. A minimum amount of security lighting would be installed in the central developed area of the park. Security lighting would consist of two to three pole mounted light fixtures near the play areas and in the parking lot. Lighting may also be mounted on the restroom building. Light levels would be sufficient to allow a patrol car to see the developed area of the park from the road, but are not intended to promote use of the park after the park is closed.

9. Surrounding land uses and setting:

The project site is located south of the existing Orchards at Hiddenbrooke residential development within Sky Valley, in the northeastern portion of the City of Vallejo in Solano County. Sky Valley is a long, narrow valley bounded by Sulphur Springs Mountain to the west and the Cordelia Hills to the east. The project site lies at the southern end of a rectangular piece of property, commonly referred to as the “panhandle,” which extends in a southeasterly direction along the valley floor from the main portion of the Hiddenbrooke residential development.

The project site is located on the 50-acre southern parcel of the Orchards property. The site consists of a former walnut orchard located on relatively flat to gently sloping terrain and is flanked by Sulphur Springs Creek to the west, an unnamed tributary to Sulphur Springs Creek to the north, moderately to steeply sloping hills to the east, and former orchard lands to the south. No buildings or other structures are present on the project site. Surrounding land uses include the Orchards at Hiddenbrooke subdivision immediately to the north and open space/grazing lands to the south, east, and west.

Dominant vegetation types on the site consist of an abandoned walnut orchard and non-native grassland. The walnut orchard is located on the flat portion of the site and is composed of English walnut (*Juglans regia*) trees. The non-native grassland is composed of introduced, annual grasses, as well as native and non-native forbs (broad-leaved plants). Non-native grassland occurs within the orchard area and on the eastern sloping portion of the site. Sulphur Springs Creek supports riparian vegetation dominated by coast live oak (*Quercus agrifolia*), arroyo willow (*Salix lasiolepis*), and California bay (*Umbellularia californica*); these species form a well-developed riparian canopy along the creek. This drainage also supports a variety of understory species. The riparian vegetation along the tributary drainage is composed of similar species.

The 50-acre southern parcel of the Orchards property, which includes the project site, is part of the Tri-City and County Regional Park and Open Space Management Area and is designated for Agriculture and Open Space Preservation under the *Tri-City and County Cooperative Plan for Agriculture and Open Space Preservation* (The Planning Collaborative 1994). The Tri-City and County Area is intended for recreation, open space, habitat, managed resources production and agricultural resources protection, and does not allow for urban development. The City of Vallejo and the former owner of the Orchards property, the Owens Mortgage Investment Fund, entered into a development agreement (City of Vallejo 1999a) to provide for a school and park

site within this area, as described below. However, development on the project site must be consistent with the guidelines outlined in the *Tri-City and County Cooperative Plan for Agriculture and Open Space Preservation*.

The development agreement designated the 16-acre northern portion of the Orchards property for residential development and designated the 50-acre southern portion of the property for public open space, elementary school, and park uses. The development agreement required the recordation of a conservation easement over the 50-acre southern portion of the property (City of Vallejo 1999b); the easement was granted to the following organizations: City of Vallejo, Tri-City and County Cooperative Planning Group for Open Space and Agriculture, and the Solano Land Trust (formerly known as the Solano County Open Space and Farmlands Foundation). In addition to agricultural and recreational uses, the conservation easement expressly permits the use of up to ten net useable acres for public elementary school purposes and up to six to eight net useable acres for developed park purposes. Because the park is currently proposed on a parcel owned by the Vallejo City Unified School District (VCUSD), the City of Vallejo has negotiated a long-term lease of VCUSD's parcel to allow for development of the Hiddenbrooke Park project.

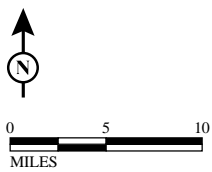
The entire Hiddenbrooke development, including the park site, is zoned by the City of Vallejo as a Mixed Used Planned Development (MUPD). The Hiddenbrooke development is sub-zoned according to the planned use of individual areas.

- 10. Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement): N/A**



LSA

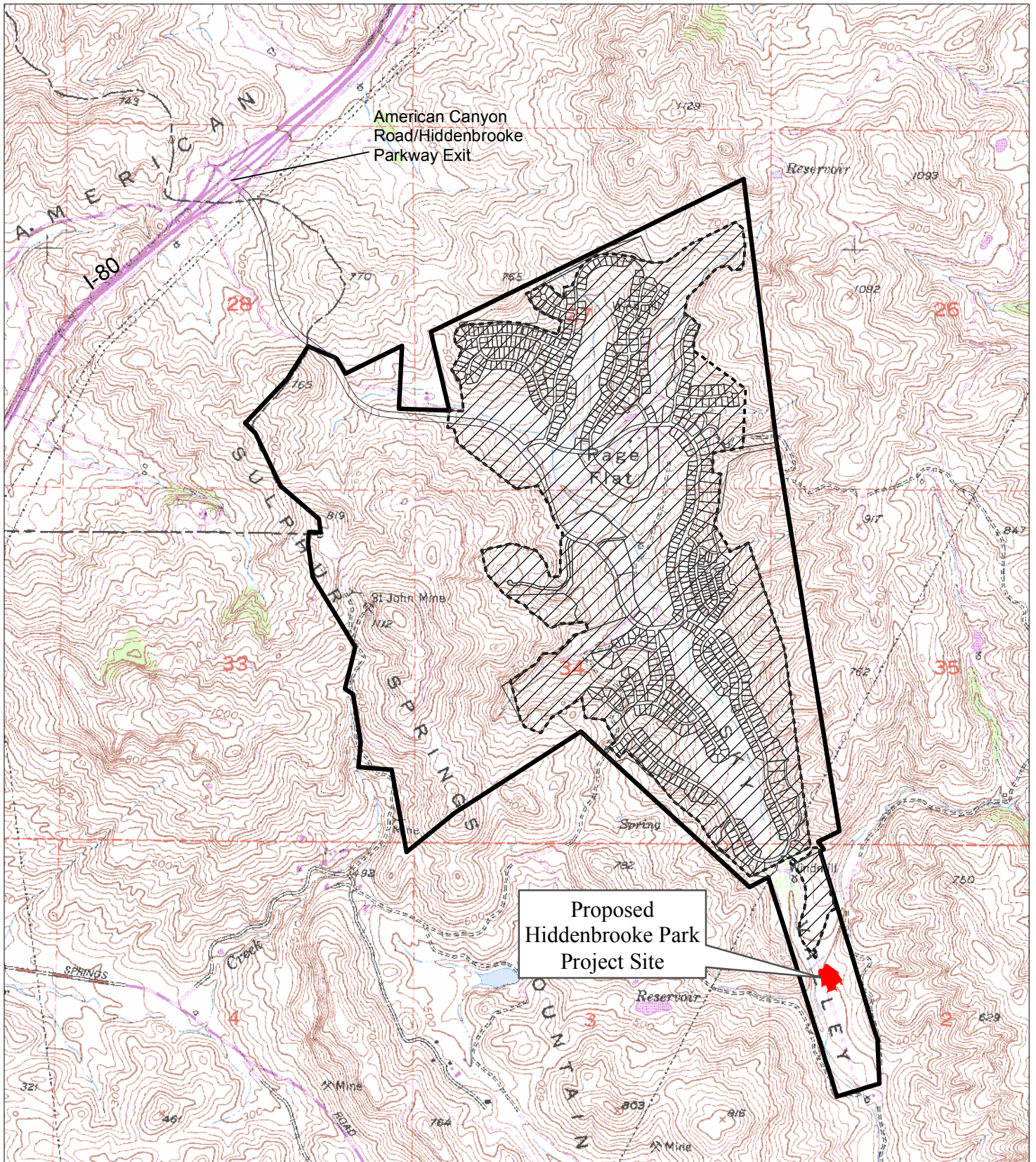
FIGURE 1



SOURCE: StreetMap North America (2009).



I:\CEN1201\Maps\Figure 1_Regional Location.mxd (3/1/2013)

*Hiddenbrooke Park
Regional Location*



LSA

LEGEND

-  Approximate Hiddenbrooke Property Boundary
-  Approximate Existing Development Footprint

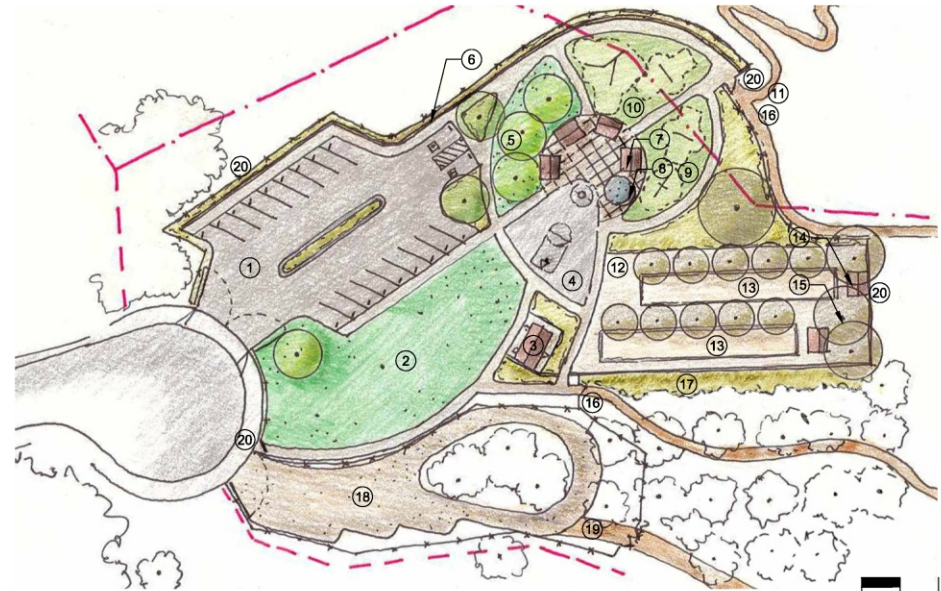


SOURCE: USGS 7.5' QUAD - Cordelia, Calif. 1980

F:\CEN1201\Maps\CEQA\Figure2-SiteLocation.mxd (3/1/2013)

FIGURE 2

Hiddenbrooke Park
Project Site Location



Park Concept Sketch

Scale: 1" = 40' - 0" 0 20 40

LEGEND

- ① PARKING LOT - 18 STANDARD / 2HC AC DRIVE AISLES REINFORCED GRAVEL PARKING STALLS. DOUBLE SWING GATE
- ② OPEN LAWN FOR INFORMAL PLAY
- ③ RESTROOM - PREFABRICATED BUILDING W/ ACCESSIBLE GENDER SPECIFIC RESTROOMS AND EXTERIOR DRINKING FOUNTAIN
- ④ 1/2 BASKETBALL COURT, INFORMAL
- ⑤ SMALL ORNAMENTAL TREES MEDIUM SIZE CANOPY SHADE TREES IN PICNIC LAWN
- ⑥ RETAINING WALL
- ⑦ SMALL STRUCTURES OVER TABLES
- ⑧ WATER PLAY - GROUND SPRAY NOZZLES IN PAVEMENT
- ⑨ TOT PLAY
- ⑩ SCHOOL AGE PLAY
- ⑪ STABILIZED DG PATH. CONNECTS TO A NETWORK OF PATHS THROUGH REMNANT ORCHARD
- ⑫ NEW ORCHARD STYLE TREE PLANTING IN DG PAVING
- ⑬ BOCCO COURT
- ⑭ SMALL STRUCTURE OVER PICNIC TABLE
- ⑮ LARGE SCALE TREES, QUERCUS LOBATA SUGGESTED
- ⑯ DG PATH
- ⑰ RETAINING WALL SCREEN W/ SHRUBS
- ⑱ EQUESTRIAN PARKING (3 TRUCKS + TRAILERS) - GRAVEL SURFACE W/ WOOD BLOCK PARKING CONTROL. FENCE AND GATED. FENCE AT LAWN ALLOWS FOR HORSE VIEWING
- ⑲ EQUESTRIAN PATH - COMPACTED NATIVE SOIL, NO PAVING. FUTURE CONNECTION TO EXISTING OPEN SPACE TRAIL SYSTEM. TURN RADIUS ON CONNECTING PATHWAY LARGE ENOUGH TO ACCOMMODATE EMERGENCY VEHICLES.
- ⑳ 6' TALL PERIMETER CHAIN LINK FENCE. ACCESSIBLE GATES AT PATH ENTRY/EXIT.



Shade Structures - color, architectural details, and materials connect structures to park theme



Bocce Courts - rustic in design and materials to match park character



Site features and details selected to create a rural and agricultural character for the park



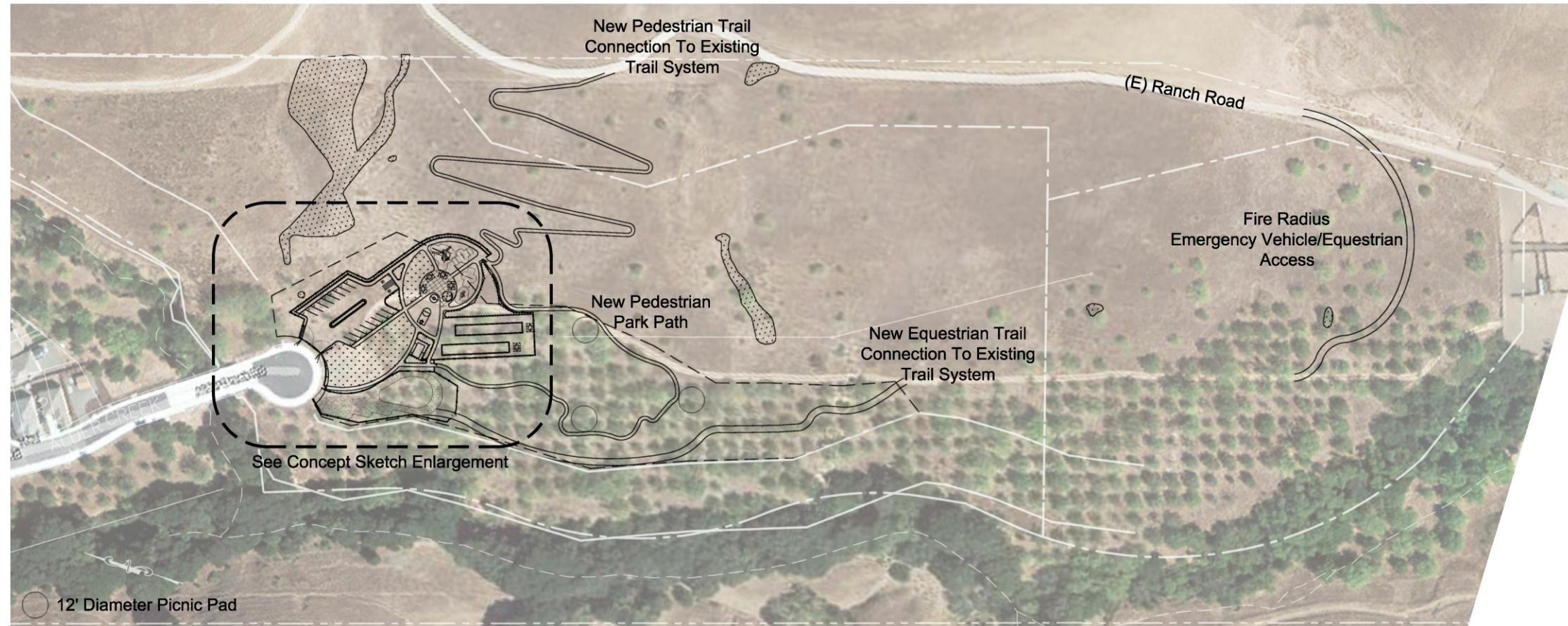
Bocce Courts - alternate design options



Pathways - meandering through remnant orchard are an important component of the design



Play Structures - character and materials to match park theme



Play Area Water Feature



Retaining Walls - rustic in appearance to reinforce park theme



Retaining Walls - stone detail option



Retaining Walls - premanufactured material

LSA



0 100 200
FEET

SOURCE: Vallier Design Associates, Inc. (12/03/2012)

P:\CEN1201\G\Figure 3_Proposed Project.cdr (03/04/2013)

FIGURE 3

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

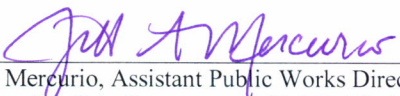
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated" as indicated by the checklist on the following pages.

- | | | |
|--|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural/Forest Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology/Soils |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards | <input 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 type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

Determination. (To be completed by the Lead Agency.)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.


Jill Mercurio, Assistant Public Works Director/City Engineer
City of Vallejo Department of Public Works


Date

EVALUATION OF ENVIRONMENTAL IMPACTS

This section identifies the environmental impacts of this project by answering questions from Appendix G of the CEQA Guidelines, the Environmental Checklist Form. The environmental issues evaluated in this chapter include:

- Aesthetics
- Agricultural and Forest Resources
- Air Quality
- Biology
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Services Systems
- Mandatory Findings of Significance

All analyses take account the entire action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts. Impacts are categorized as follows:

Potentially Significant Impact is appropriate if there is substantial evidence that an effect is significant, or where the established threshold has been exceeded. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report (EIR) may be required.

Less Than Significant with Mitigation Incorporated applies where the incorporation of mitigation measures would reduce an effect from Potentially Significant Impact to a Less Than Significant Impact. Mitigation measures are prescribed to reduce the effect to a less than significant level.

Less Than Significant applies when the project will affect or is affected by the environment, but based on sources cited in the report, the impact will not have an adverse affect. For the purpose of this report, beneficial impacts are also identified as less than significant. The benefit is identified in the discussion of impacts, which follows each checklist category.

A **No Impact** answer is adequately supported if referenced information sources show that the impact simply does not apply to projects like the one involved. A No Impact Answer is explained where it is based on project-specific factors as well as general standards.

ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Affected Environment

The project site is located south of the existing Orchards at Hiddenbrooke residential development within Sky Valley in the northeastern portion of the City of Vallejo. Sky Valley is a long, narrow valley bounded by Sulphur Springs Mountain to the west and the Cordelia Hills to the east.

The project site supports a former walnut orchard and open pasture/grasslands on a relatively flat to gently sloping stream terrace that is flanked by Sulphur Springs Creek to the west, an unnamed tributary to Sulphur Springs Creek to the north, moderately to steeply sloping hills to the east, and orchard and grazing lands to the south. No buildings or other structures are present on the project site.

The existing visual setting reflects a combination of both manmade and natural conditions. Manmade conditions include residential development, Alder Creek Road and the existing bridge over the unnamed tributary to Sulphur Springs Creek, and associated improvements. Surrounding land uses include residential development to the north and open space/grazing lands to the south, east and west. Generally, this open space is dominated by natural vegetation, mostly annual grassland. Views from the site consist primarily of the adjacent hillsides dominated by annual grassland vegetation, riparian vegetation associated with Sulphur Springs Creek and the unnamed tributary drainage and adjacent residential development.

Due to its topography, the site is largely visually isolated from surrounding areas that are accessible to the public. The project site is partially visible from several residences to the north of the site and from Alder Creek Road.

Discussion

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

Less Than Significant Impact. The project site is located in a relatively flat area along the valley floor, resulting in a limited viewshed. Proposed park facilities would be no taller than the adjacent residential structures. Furthermore, the City of Vallejo has not designated any scenic vistas in the vicinity of the project site. Therefore, the proposed project would not have a substantial adverse effect on scenic vistas. This impact is considered less than significant.

- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?*

No Impact. The project site is not located within the vicinity of a State Scenic Highway (Caltrans 2012). The proposed project would not substantially damage scenic resources, including trees and is not located near any rock outcroppings or historic buildings. Therefore, no impacts to scenic resources would occur with implementation of the proposed project.

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

Less Than Significant Impact. Development of the proposed project would result in a visual change to the project site. However, development would be fairly minimal and would be in keeping with the character of the Orchards residential development immediately to the north. In addition, riparian and associated upland habitats along Sulphur Springs Creek and the unnamed tributary drainage and the majority of the existing orchard trees would be preserved. This impact would be less than significant.

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

Less Than Significant Impact. Streetlights, vehicle head and tail lights, and lighting associated with the Orchards development are the existing sources of light and glare in the project area. The proposed project would involve construction of a neighborhood park that would not be open at night. Similar to other public parks in Vallejo, the proposed park would be closed to the public from dusk to dawn. Gates at the park entries and perimeter fencing would prohibit public access when the park is not open for use. A minimum amount of security lighting would be installed in the central developed area of the park. Security lighting would consist of two to three pole mounted light fixtures near the play areas and in the parking lot. Lighting may also be mounted on the restroom building. Light levels would be sufficient to allow security patrols to see the developed area of the park from the road, but are not intended to promote use of the park after the park is closed. Therefore, the proposed project would not create a new source of light or glare, which would adversely affect day or nighttime views.

	Potentially Significant	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--	------------------------------------	---	---	----------------------

II. AGRICULTURAL 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 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 a non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input 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 forestland to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Affected Environment

The project site is classified by the U.S. Soil Conservation Service (SCS) as having primarily Class II soils. Class II soils are considered to have some restrictions which limit the choice of plants, but are generally suited to cultivation of row crops, irrigated field crops, orchards, and pasture. Class II soils are not considered prime agricultural land by the SCS, usually due to the lack of a feasible water source and facilities for irrigation. However, if feasible irrigation facilities were developed at the site, these soils could be considered prime agricultural land.

The current annual nut yields from the orchard are likely below the typical averages for orchards in northern California due to the lack of irrigation, and the absence of current orchard management. Nevertheless, the site is designated by the California Department of Conservation (CDC) as Unique Farmland. This classification is given to land which does not meet the state criteria for Prime Farmland or Farmland of State Importance classification, but which has nevertheless been used for the production of specific high economic value crops. Such areas are considered to have the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality or high yields of a specific crop when treated and managed according to current farming methods.

No forest land or timberland is identified on or near the project site, and the project site is not zoned for forest or timber uses.

Discussion

- 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 a non-agricultural use?*

Less Than Significant Impact. The proposed project is located in an area designated as Unique Farmland (former walnut orchard). The proposed project would convert a small portion of the former walnut orchard (approximately 1.4 acres) to a neighborhood park facility. The proposed park has been designed to minimize impacts to existing orchard plantings. The existing orchard is not currently being actively managed for agricultural use, nor has it been actively managed for agricultural use for over 15 years. Therefore, this impact is considered less than significant.

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

No Impact. The project site is not zoned for agricultural use and is not under a Williamson Act contract. Therefore, the proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract.

- c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

No Impact. The project area contains no forest or timberland and is not zoned for forest land, timberland, or timberland production.

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

No Impact. See response II(c) above.

- 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?*

Less Than Significant Impact. The proposed project would not involve other changes in the existing environment, which could result in the conversion of farmland to non-agricultural use. The proposed project is not growth inducing; it is proposed to serve existing demand for recreation facilities within the Hiddenbrooke community. As described above, the proposed project would result in the conversion of a small amount of former walnut orchard (approximately 1.4 acres) to a non-agricultural use. However, the walnut orchard is not currently managed for agricultural use. Therefore, this impact is considered less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The project site is located within the San Francisco Bay Air Basin (SFBAB) and is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). Within the SFBAB, ambient air quality standards for ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM₁₀, PM_{2.5}), and lead (Pb) have been set by both the State of California (State) and the federal government. The State has also set standards for sulfate and visibility. As of July 2012, the SFBAB is under non-attainment status for ozone and particulate matter (PM₁₀ and PM_{2.5}) for State standards. The SFAB is classified as marginal non-attainment for the federal ozone 8-hour standard.

Vallejo’s wind, atmospheric stability and terrain generally allow for the transport and dilution of pollutants, except for occasionally in summer and fall when high pressure over the Pacific Coast diminishes sea breeze (usually lasts 3-5 days) or during periods of high pressure in the winter (usually lasts 2-4 days) which cause peak concentrations of carbon monoxide.

Air pollution sources in Vallejo include vehicles, combustion of fuel for space and water heating, industrial processes, commercial uses, the evaporation of fuels and solvents, incineration, fires, agricultural tilling and pesticides. Vehicles are the largest single source of air pollutants in Vallejo, accounting for 80 percent of emitted carbon monoxide, 40 percent of nitrogen oxides, 40 percent of hydrocarbons, and 5 percent of emitted particulates and sulfur dioxides in Solano County.

Discussion

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

Less Than Significant Impact. An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of an air quality plan is to bring the area into compliance with the requirements of Federal and State air quality standards. To bring the San Francisco Bay Area region into attainment, the Bay Area Air Quality Management District (BAAQMD) has developed the 2005 Ozone Strategy and the 2010 Clean Air Plan (CAP).

The air quality plans use the assumptions and projections of local planning agencies to determine control strategies for regional compliance status. Since the plans are based on local General Plans, projects that are deemed consistent with the applicable General Plan are usually found to be consistent with the air quality plans. The proposed project has been adopted as an amendment to the Sky Valley Specific Plan and is consistent with the City of Vallejo General Plan.

The BAAQMD's Bay Area CAP contains BAAQMD-wide control measures to reduce carbon monoxide and ozone precursor emissions. Excavation and earthwork associated with construction of the proposed project would be confined to temporary grading, landscaping, and construction activities. Both the area of ground disturbance and the amount of construction equipment operating within the project site would be limited. In addition, the intent of the proposed project is to serve the local population; therefore the proposed project would not generate a substantial number of car trips that would increase regional carbon monoxide and ozone precursor emissions. Therefore, the proposed project is not expected to conflict with, or obstruct implementation of, relevant air quality plans.

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

Less Than Significant with Mitigation Incorporated. Air pollutant emissions associated with the proposed project would occur over the short term in association with construction activities, such as grading and vehicle/equipment use. No long-term emissions would result from the proposed project.

Long Term (Operational) Emissions. Long-term air emissions impacts are associated with any change in permanent use of the project site by on-site stationary and off-site mobile sources that substantially increase vehicle trip emissions. There are no stationary sources associated with the proposed project. As described in Response III(a) above, the proposed project would not generate a substantial number of car trips that would increase regional carbon monoxide and ozone precursor emissions.

The BAAQMD has established operation and construction screening level sizes to provide a conservative indication of whether a project could result in a potentially significant air quality impact. At 2 acres, the park site is well below the screening size for operational criteria air pollutants of 2,613 acres, greenhouse gas emissions (600 acres) and construction emissions (67 acres). Therefore, construction and operation of the proposed park would not be a

significant source of regional air pollutants. The proposed park also would generate less than 100 trips per day and therefore would not generate a substantial amount of daily regional emissions. Therefore, operation of the proposed park would be less than significant.

Short-Term (Construction) Emissions. Air pollutant emissions associated with the proposed project would occur over the short term associated with facility construction. However, as described in Response III(a) above, excavation and earthwork associated with construction of the proposed project would be confined to temporary grading, landscaping, and construction activities. Both the area of ground disturbance and the amount of construction equipment operating within the project site would be limited.

Construction activities could generate combustion emissions from utility engines, on-site heavy duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting construction crews. Exhaust emissions during construction would vary daily as construction activity levels change. The use of construction equipment would result in localized exhaust emissions. Due to the limited extent of development proposed, the projected short-term emissions of criteria pollutants as a result of project construction are expected to be below emissions thresholds established by the BAAQMD.

Fugitive dust emissions are associated with excavation and grading operations. Dust generated daily during construction would vary substantially, depending on the level of activity, the specific operations, and weather conditions. If construction activities associated with the proposed result in blowing dust, a major cause of increased PM₁₀ and PM_{2.5} concentrations, the project could contribute to the Bay Area's existing particulate matter air quality violation.

Mitigation Measure AIR-1: Consistent with guidance from the Bay Area Air Quality Management District, the following controls shall be implemented at the construction site to control construction emissions:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt 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 shall be 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.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points regarding maximum idling time.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- The contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

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

Less Than Significant Impact. As discussed in Response III(b), based on project-related emission estimates, the proposed project would not result in substantial impacts to the levels of any criteria pollutants either during operation or construction of the proposed project.

d) *Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant with Mitigation Incorporated. Sensitive receptors are facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Sensitive receptors adjacent to the project site include neighboring residents in the Orchards at Hiddenbrooke residential development. As described in Response III(a) and III(b) above, the proposed project would generate minimal vehicular traffic. Therefore, implementation of the proposed project would not introduce long-term, substantial pollutant concentrations.

Construction of the proposed project may expose surrounding sensitive receptors to airborne particulates and fugitive dust as well as a small quantity of construction equipment pollutants (i.e., diesel-fueled vehicles and equipment). As described in Response III(b) above, impacts would be below peak-day pollution threshold criteria and would be of short duration. Implementation of Mitigation Measure AIR-1 would reduce potential impacts related to particulate matter and fugitive dust to a level below significance.

Therefore, sensitive receptors are not expected to be exposed to substantial long-term or short-term pollutant concentrations, and no significant air quality impacts would result from the proposed project.

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

No Impact. The proposed project would not generate objectionable odors. In addition, the proposed project is not located downwind from any significant odor sources (e.g., landfills, sewage treatment plants) that could affect persons within the project site. Therefore, implementation of the proposed project would not create objectionable odors affecting a substantial number of people or subject people to objectionable odors.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" 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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment:

As described above, the park project is proposed on the 50-acre southern parcel of the Orchards at Hiddenbrooke (Orchards) property. The approximately 3.2 acre project encompasses an existing graveled parking area (0.2 acre), portions of a former walnut orchard (1.4 acres) and non-native grassland community (1.6 acres) located on relatively flat to gently sloping terrain.

The site generally drains to the west toward Sulphur Springs Creek. A number of swales drain the slopes above and to the south of the site, but are not directly connected to Sulphur Springs Creek. A total of 1.57 acres of jurisdictional waters of the United States/waters of the State are present on the

50-acre southern parcel of the Orchards property (USACOE 2008). An approximately 0.50 acre seasonal wetland (SW-D) is present on the slopes immediately to the east of the site. The unnamed tributary drainage north of the site conveys intermittent flows westward to Sulphur Springs Creek from off-site areas on the adjacent Eastern Swett property. Sulphur Springs Creek is a perennial watercourse that drains southward through Sky Valley to Lake Herman and eventually to Suisun Bay.

Dominant vegetation types on the project site consist of an abandoned walnut orchard and annual grassland. The walnut orchard is located on the flat portion of the site and is composed of English walnut (*Juglans regia*) trees grafted onto black walnut (*Juglans hindsii*) root stock. Annual grassland occurs within the orchard understory and on the eastern sloping portion of the site and is composed of introduced annual grasses, including soft chess brome (*Bromus hordeaceus*), Italian ryegrass (*Festuca perennis*), hare barley (*Hordeum murinum*), brome grass (*Vulpia bromoides*), oats (*Avena* sp.), and creeping wild-rye (*Elymus triticoides*). Native and non-native forbs (broad-leaved plants) including cut-leaf geranium (*Geranium dissectum*), bristly ox-tongue (*Helmenthotheca echioides*), and California poppy (*Eschscholzia californica*) occur within the annual grassland community. Portions of the annual grassland support a heavy component of non-native ruderal species including mustard (*Brassica* sp.), wild radish (*Raphanus sativa*), artichoke thistle (*Cynara cardunculus*) and yellow star-thistle (*Centaurea solstitialis*).

Sulphur Springs Creek, on the west side of the site, supports riparian vegetation dominated by mature coast live oak (*Quercus agrifolia*) with components of arroyo willow (*Salix lasiolepis*), California bay (*Umbellularia californica*), and California buckeye (*Aesculus californica*), with scattered individuals of black walnut and blue elderberry (*Sambucus nigra*). These species form a well-developed riparian canopy along the reach of the creek adjacent to the project site. Arroyo willow becomes more dominant in the southern portion of this riparian corridor. A variety of understory species such as Himalayan blackberry (*Rubus armeniacus*), California blackberry (*Rubus ursinus*), snowberry (*Symphoricarpos mollis*), and poison oak (*Toxicodendron diversilobum*) are also present in the riparian understory. The riparian vegetation along the unnamed tributary drainage, north of the site, is composed of the species noted above, but is generally narrower in width when compared to the riparian vegetation along Sulphur Springs Creek.

The orchard and grassland areas on the project site and riparian areas adjacent to the site provide habitat for many birds, mammals, reptiles, and amphibians. Annual grassland provides important foraging habitat for various species of raptors such as white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), and barn owl (*Tyto alba*). Mammals that are commonly found in this habitat type and expected to occur on the site include mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), common opossum (*Didelphis marsupialis*), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), and California vole (*Microtus californicus*). Reptiles and amphibians expected to occur on the site include western fence lizard (*Sceloporus occidentalis*), southern alligator lizard (*Elgaria multicarinata*), aquatic gartersnake (*Thamnophis atratus*), terrestrial gartersnake (*Thamnophis elegans*), gopher snake (*Pituophis catenifer*), ringneck snake (*Diadophis punctatus*), Sierran tree frog (*Pseudacris sierra*), and western toad (*Anaxyrus boreas*).

California red-legged frog (*Rana draytonii*; CRLF), a federally-threatened species, has been observed in aquatic and upland habitats throughout Sky Valley and on the adjacent Vallejo Swett Ranch.

Although observations of CRLF in Sky Valley have been limited in recent years, this species was well-documented from the area following its discovery in Sky Valley in the Fall of 1993. Significant numbers of CRLF were subsequently observed using the Hiddenbrooke golf course ponds and other water features in the mid-1990s. However, the CRLF population has declined since that time, possibly due to colonization by bullfrogs and water quality issues. Nevertheless, extensive areas of suitable aquatic and upland habitat for CRLF remain in the undeveloped areas surrounding Hiddenbrooke.

The most recent observations of CRLF in Sky Valley were made by LSA Associates, Inc. (LSA) in 2005 and 2006 as part of biological survey work for the proposed Hiddenbrooke Phase 3 project (approximately 1.5 miles northwest of the Orchards property). Other CRLF survey efforts have been conducted as part of on-going monitoring of the Orchards at Hiddenbrooke residential project (LSA 2006, LSA 2008). These surveys have been conducted annually since 2005 and have encompassed the reach of Sulphur Springs Creek and associated pond (known as the Outlet Pond) immediately adjacent to (west of) the Orchards at Hiddenbrooke residential development, as well as the unnamed tributary drainage on the property. No CRLF have been observed by LSA biologists during any of these surveys.

Discussion

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

Less Than Significant with Mitigation Incorporated. LSA has analyzed the potential impacts of the proposed project on candidate, sensitive, and special-status species as described above. LSA searched the California Natural Diversity Database (CNDDDB) (2013) for current and historic records of special-status species and sensitive habitat occurrences in the project vicinity. In addition, LSA reviewed the *Initial Baseline Survey for the Vallejo Swett, Eastern Swett, and King Ranches* (IBS) prepared by the Solano Land Trust in partnership with the Pacific Gas and Electric Company (SLT 2007). This document provides a comprehensive baseline inventory of existing natural resources on these properties, two of which are contiguous with the Orchards property (i.e., Vallejo Swett Ranch and Eastern Swett Ranch). Portions of the IBS include the Orchards property and assess/describe biological resources that are known to occur or have potential to occur there.

Special-Status Animals

Based on an evaluation of the habitats present on the southern parcel of the Orchards property, a review of CNDDDB records, and findings described in the IBS, special-status animal species known to occur or having potential to occur on the site include the following: Callippe silverspot butterfly (*Speyeria callippe callippe*; federally endangered), CRLF, Western pond turtle (*Actinemys marmorata*; California Species of Special Concern [CSC]), burrowing owl (*Athene cunicularia*; CSC), golden eagle (*Aquila chrysaetos*; California Fully Protected [CFP]), loggerhead shrike (*Lanius ludovicianus*; CSC), tricolored blackbird (*Agelaius tricolor*; CSC), northern harrier (*Circus cyaneus*; CSC), white-tailed kite (*Elanus leucurus*; CFP), American badger (*Taxidea taxus*; CSC), pallid bat (*Antrozous pallidus*; CSC); greater western mastiff bat

(*Myotis evotis*; CSC); and Pacific western big-eared bat (*Corynorhinus townsendii townsendii*; CSC).

Callippe silverspot butterfly (CSSB) and stands of its larval host plant, Johnny-jump-up (*Viola pedunculata*), were documented in the Sky Valley area in 1990 (Murphy 1990). More recently, CSSB and Johnny-jump-up were documented on the adjacent Vallejo Swett and Eastern Swett ranches during sensitive invertebrate species surveys conducted in 2005 as part of the IBS (SLT 2007). These surveys included the Swett ranches noted above, the Orchards property, and King Ranch. Although, no CSSB were observed on the Orchards property during these surveys, adult CSSB presumably move across the property during dispersal (SLT 2007). Due to the presence of grasslands on the Orchards property and known occurrence of CSSB in the vicinity, additional focused surveys for Johnny-jump-up, were conducted by LSA on March 28 and April 24, 2007. These surveys coincided with the time period when stands of Johnny-jump-up were observed to be flowering on the Hiddenbrooke Phase 3 property, approximately 1.5 miles northwest of the Orchards property. No Johnny-jump-up individuals or nectar plants preferred by CSSB (e.g., milk thistle [*Silybum marianum*], bull thistle [*Cirsium vulgare*], etc.) were observed during either of the surveys. Furthermore, the mapping of Johnny-jump-up populations contained in the IBS does not indicate presence of this species on the Orchards property (SLT 2007). As indicated above, the southern parcel of the Orchards property does not support habitat conditions suitable for CSSB due to the absence of Johnny-jump-up and preferred nectar plants. As such, the proposed project is not expected to result in impacts to CSSB.

The reaches of Sulphur Springs Creek and unnamed tributary drainage that border the site are considered suitable aquatic habitat for CRLF (portions of Sulphur Springs Creek could support CRLF breeding). In addition, the seasonal wetland (SW-D) to the east of the project site also provides suitable habitat for CRLF foraging, refuge, dispersal, and seasonal hydration (this feature does not provide suitable breeding habitat due to the lack of adequate ponding and limited hydroperiod). Upland areas adjacent to suitable aquatic habitat are essential for CRLF refuge, foraging, and dispersal. Although much of the project site has been subject to periodic disturbance associated with walnut orchard operations and other agricultural activities since the 1950s, the orchard and annual grasslands on the site are considered suitable upland habitat for CRLF. The project has been designed to avoid temporary and permanent impacts aquatic habitat for CRLF (no waters of the U.S./State would be filled by project activities). However, the proposed project would result in permanent impacts to approximately 2.1 acres of suitable upland habitat for CRLF. It should be noted that portion of the project site is located within Unit SOL-1 of designated Critical Habitat for CRLF as identified in the Revised Designation of Critical Habitat for CRLF; Final Rule (USFWS 2010). However, because the project does not have a federal nexus, such as a federal permit, license or funding, the fact that the project site is located within Critical Habitat does not have any implications or trigger the need for additional CRLF avoidance, minimization or mitigation under CEQA.

Implementation of Mitigation Measures BIO-1 through BIO-6 (described below) would reduce potentially significant impacts to CRLF to a less than significant level. These mitigation measures would also address potential impacts to Western pond turtle, since the habitat requirements of this species are similar to those of CRLF.

White-tailed kite and loggerhead shrike could nest in the trees and large shrubs along Sulphur Springs Creek and may also nest in the walnut orchard on the site. If construction activities are conducted during the breeding season (March through August), construction activities could directly impact nesting birds by removing trees or shrubs that support active nests. Prolonged loud construction noise could also disturb nesting birds, resulting in nesting failure. The grassland habitat on-site provides potential nesting habitat for ground-nesting special-status birds, such as burrowing owl and northern harrier. Grading or other disturbance within this grassland habitat could impact these and other ground-nesting birds. All native birds and their nests are protected under the federal Migratory Bird Treaty Act and provisions of the California Fish and Game Code. Implementation of Mitigation Measure BIO-7 would reduce potential impacts to nesting birds to a less-than-significant level.

The annual grasslands on the project site also provide foraging habitat for golden eagle and tricolored blackbird; these species do not likely nest on the project site due to the lack of suitable nesting habitat. Golden eagles nest along cliff faces and in tall, sheltered trees, and tricolored blackbirds nest in marshes and dense vegetation. Impacts to foraging habitat for these species resulting from project development are considered less than significant due to the extensive areas of preserved open grasslands surrounding the project site that provide suitable foraging habitat for these special-status bird species.

Although there are no confirmed roost sites for special-status bat species in the site vicinity, the mature trees in the riparian corridor along Sulphur Springs Creek and within the walnut orchard may provide suitable roosting habitat (dense foliage or cavities) for bats. Removal of trees on the site and construction activities within the vicinity of the on-site trees could impact roosting bats. Implementation of Mitigation Measure BIO-8 would reduce potentially significant impacts to special-status bat species to a less than significant level.

The grassland habitat on the project site provides suitable habitat for American badger. American badgers are known to occur in the region and could den and forage on the project site. Project development could result in impacts to this species from direct mortality or injury during construction. Implementation of Mitigation Measure BIO-9 would reduce potentially significant impacts to American badger to a less than significant level.

Implementation of the following mitigation measures would reduce potentially significant impacts to special-status animals to a less-than-significant level:

Mitigation Measure BIO-1: The applicant shall establish and preserve a minimum 100-foot setback from Sulphur Springs Creek and the unnamed tributary drainage (as measured from the top of bank/edge of riparian vegetation) to offset project impacts to CRLF upland habitat resulting from project implementation. The 100-foot setback shall extend along the length of both drainages on the 50-acre southern parcel of the Orchards property. The 100-foot setback encompasses approximately 6.7 acres. This area shall remain in a natural, undeveloped condition and shall be protected via a conservation easement that establishes the setback area as wildlife habitat in perpetuity. The details of how the 100-foot setback will be managed as CRLF upland habitat, including a description of allowable activities (e.g., grazing), will be described in in a separate habitat management plan. A secure source of funding will be provided to provide for long-term

management of the 100-foot setback consistent with the provisions of the habitat management plan.

Mitigation Measure BIO-2: Prior to the initiation of construction, a qualified biologist (project biologist) shall conduct a pre-construction training/orientation for contractor personnel regarding the biological sensitivity of the project. The purpose of the education/training will be to (1) provide information regarding CRLF and other sensitive biological resources on and in the vicinity of the site; (2) outline project-specific avoidance and minimization measures required to avoid impacts to CRLF and other biological resources; and (3) reinforce the importance of confining equipment and personnel to identified work areas. Training sessions will be required for any new construction personnel before being allowed access to the site.

Mitigation Measure BIO-3: Pre-construction surveys for CRLF shall be conducted by the project biologist prior to commencement of construction. The pre-construction surveys shall be conducted not more than 48 hours before commencement of construction activities. If any CRLF are found, individuals shall be relocated, with prior USFWS concurrence, to suitable habitat outside of the construction zone. Any individuals handling/relocating CRLF shall be approved by USFWS.

Mitigation Measure BIO-4: Prior to the initiation of ground disturbance, temporary wildlife exclusion fencing will be installed around the perimeter of the work area to prevent CRLF and other wildlife from entering the work area during construction. The fence shall be constructed of plywood or Ertec E-Fence (E-Fence) material. The E-Fence material is made from recycled plastic and has a mesh size of 0.25 inches. The height of the panels will be a minimum of 30 inches, with a minimum five inches buried and a minimum of 25 inches above-ground. The exclusion fence will remain in place until all construction is completed and equipment is demobilized. Exclusion fencing will not be required along the proposed pedestrian path loop, hiking access trail segment to Eastern Swett Ranch or the unpaved equestrian/emergency vehicle access route, as construction of these elements is limited in duration, intensity and extent. However, construction of these project elements will be monitored by the project biologist.

Mitigation Measure BIO-5: The project biologist shall be present at the work site until such time as all pre-construction survey, contractor training/orientation, wildlife exclusion fence installation and habitat disturbance (i.e., clearing and grubbing of the site) have been completed. After this time, the project biologist shall make a once-per-week site visit during the construction phase of the project to inspect the exclusion fence and ensure it is properly maintained and functioning to exclude CRLF and other wildlife from the work area. The project biologist shall have the authority to halt any action that might result in biological resource impacts that exceed the magnitude described in this document.

Mitigation Measure BIO-6: To prevent inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches more than one foot deep will be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks with a slope of

2:1. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals.

Mitigation Measure BIO-7: If feasible, all vegetation removal shall be conducted during the non-breeding season (i.e., September through February) to avoid direct impacts to nesting birds. If such work is scheduled during the breeding season (February through August), a qualified wildlife biologist shall conduct pre-construction surveys to determine if any birds are nesting on or in the vicinity of the site. The pre-construction surveys shall be conducted not more than 14 days prior to the start of construction from March through May (since there is higher potential for birds to initiate nesting during this period), and not more than 30 days prior to the start of work from June through August. If active nests are found in the work area, the project biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist and will be based on the nesting species, its sensitivity to disturbance, and the expected type(s) of disturbance.

Mitigation Measure BIO-8: Preconstruction surveys for bat roosts shall be conducted in all trees that will be removed or modified by the project. The survey should take place no more than 14 days prior to construction/removal activities. If special-status bats are found onsite, and the roost would be destroyed by project construction, an artificial roost shall be provided for the bats. The artificial roost shall be constructed and placed on-site prior to removal of the existing roost. A mitigation plan specifying the construction details and location of the artificial roost structure shall be prepared by the City and approved by CDFW prior to removal of the existing roost. If feasible, materials from roost sites should be salvaged for use in the construction of artificial roosts. A report documenting the implementation of the plan shall be provided to CDFW within one month of completion of the artificial roost construction. Maternity roosts for any species of bat, either common or special-status, will not be demolished until the young are able to fly independently of their mothers.

Mitigation Measure BIO-9: Prior to the commencement of construction, a qualified wildlife biologist shall conduct surveys of the grassland habitat on-site to identify any American badger burrows/dens. These surveys shall be conducted not more than 15 days prior to the start of construction. Impacts to active badger dens shall be avoided by establishing exclusion zones around all active badger dens, within which construction related activities shall be prohibited until denning activities are complete or the den is abandoned. A qualified biologist shall monitor each den once per week in order to track the status of the den and to determine when a den area has been cleared for construction. Surveys for badger dens may be conducted at the same time as the pre-construction surveys for nesting birds described in Mitigation Measure BIO-7 above.

Special-Status Plants

The presence of special-status plants on the Orchards property was generally assessed in the IBS. Focused botanical field surveys were performed in spring of 2006 in support of the IBS, with emphasis on areas where special-status species had been previously recorded and/or areas

where substrates and habitat types were considered likely to support special-status plants (SLT 2007). Although much of the survey effort focused on the adjacent properties, the IBS documented the presence of Northern California black walnut individuals in the Sulphur Springs Creek riparian corridor on the Orchards property. Northern California black walnut is considered a Rare Plant Rank (RPR) List 1B species where it occurs naturally or in native stands. Presently, only two native stands of this species remain, one in Napa County and one in Contra Costa County (CNDDDB 2013). Given the close proximity of the black walnut individuals in the riparian corridor to the existing walnut orchard, where black walnut was used as root stock, these individuals may be naturalized from the rootstock used in the orchard. Regardless of their native or naturalized status, impacts to these individuals would be avoided by project construction activities. Given the extent of disturbance from historic agricultural use, absence of suitable native substrates to support special-status plants and heavy component of non-native ruderal species in the grassland dominated portions of the site (i.e., mustard, wild radish, artichoke thistle, yellow star-thistle, etc.) special-status plants are not expected to occur on the project site.

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

No Impact. With the exception of the riparian habitat along Sulphur Springs Creek and unnamed tributary drainage adjacent to the project site, no sensitive communities (e.g., Serpentine Bunchgrass Grasslands, Northern Claypan Vernal Pool, Valley Needlegrass Grasslands, etc.) occur on the Orchards property. As described above, the project will incorporate a 100-foot setback along Sulphur Springs Creek and the unnamed tributary drainage to protect and buffer existing riparian resources from potential adverse effects resulting from project development.

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

Less Than Significant With Mitigation Incorporated. As described above, a total of 1.57 acres of jurisdictional waters of the U.S./waters of the State are present on the 50-acre southern parcel of the Orchards property (USACOE 2008). As described above, the project has been designed to avoid direct and indirect impacts to all jurisdictional areas on the property. To ensure construction activities do not affect jurisdictional areas, the following mitigation measure will be implemented:

Mitigation Measure BIO-10: During project construction, no soil or other construction materials shall be allowed to enter or be stored in or near any jurisdictional area. The jurisdictional areas adjacent to the project site will be identified and staked by the project biologist prior to the commencement of construction to ensure construction activities do not impact these areas. Best Management Practices (BMPs) shall be employed to prevent transport of sediment into jurisdictional areas adjacent to the project site. In addition, staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of jurisdictional areas, including stream, riparian, and wetland areas.

Vehicles and equipment shall be moved a minimum of 150 feet away from jurisdictional areas prior to refueling and/or maintenance.

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

Less Than Significant. The proposed project will not substantially interfere with wildlife movement or corridors. Animals that currently move through the orchard and grassland areas on the site will temporarily have to move around the work area during construction, but long-term movement patterns through the area will remain unaffected. The proposed project does not include any features that would present impassable barriers to movement of wildlife species that are expected to occur on the site.

The reaches of Sulphur Springs Creek and the unnamed tributary drainage adjacent to the site provide corridors for wildlife dispersal and migration. The project has been designed to provide a minimum 100-foot setback from these features to facilitate their continued use for wildlife dispersal and migration following project development. The 100-foot setback proposed along Sulphur Springs Creek is intended to augment the extensive preserved open space lands and associated movement corridors on the adjacent Vallejo Swett property (immediately to the west). The 100-foot setback proposed along the tributary drainage would complement the existing 100-foot setback area on the northern side of this drainage (preserved as part of the Orchards residential project), collectively providing an approximately 250-foot-wide undisturbed corridor along this drainage. The 100-foot setback along both of these drainages would remain in a natural, undeveloped condition in perpetuity.

In addition to providing a 100-foot setback from both drainages, the overall project footprint has been reduced in size to the maximum extent practicable. The project has been designed to avoid development of the south end of the Orchards southern parcel. The undeveloped area at the southern end of the Orchards parcel would provide a significant amount of undisturbed upland habitat (i.e., annual grassland and orchard) south of the project site, for wildlife movement/dispersal. With the incorporation of the above-described creek setbacks and the extent of undeveloped/undisturbed lands to the south of the park site that will remain following project development, impacts to wildlife movement, dispersal and migration are considered less-than-significant.

In addition, most of the species that occur in the project area are generalists that are adept at moving through urban landscapes. The project will not permanently affect the ability of these species to move through the site vicinity. Therefore, the project is expected to have a less than significant impact on the movement of any native resident or migratory wildlife species

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

No Impact. The proposed project would not conflict with any local policies or ordinances protecting biological resources.

- f) *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or State habitat conservation plan?*

No Impact. The project site is not located within any lands covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Affected Environment:

A cultural resources investigation was conducted for the project site by LSA in December 2007. The investigation consisted of an archival literature review, a records search at the Northwest Information Center (NWIC), and an on-site archaeological surface reconnaissance of the project site. No cultural resources were identified in or directly adjacent to the project area by the background research or in the field survey. As described in the 1992 Supplemental Environmental Impact Report (SEIR) prepared for the Orchards residential project, the project vicinity has yielded prehistoric archaeological resources and historically-significant resources associated with farming and mining operations. For the current Initial Study, LSA conducted a records search update at the NWIC on February 25, 2013, to update the December 2007 records search. No new cultural resources or studies were identified in the project site by the records search update.

Discussion:

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

Less Than Significant with Mitigation Incorporated. The project site contains no recorded historical resources listed in the California Office of Historic Preservation’s *Historic Properties Directory*, the *National Register of Historic Places*, the *California Register of Historical Resources*. However, intact subsurface historic-period and prehistoric archaeological sites that may qualify as historical resources may be located within the project area. Implementation of Mitigation Measure CULT-1, described below, would reduce potential impacts from construction activities to a less-than-significant level.

Mitigation Measure CULT-1: If prehistoric or historical archaeological deposits or features are discovered during project activities, all work within 25 feet of the discovery shall be redirected until a qualified archaeologist assesses the situation and provides recommendations. Adverse effects to archaeological deposits should be avoided by

project activities. If such deposits cannot be avoided, they shall be evaluated for their California Register of Historical Resources eligibility. If the resources are not eligible, avoidance is not necessary. If the resources are eligible, they will need to be avoided by adverse effects or such effects must be mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparation of a report of findings; accessioning recovered archaeological materials at an appropriate curation facility; and public outreach, such as brochures or displays at libraries and museums. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the City and the Northwest Information Center.

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

Less Than Significant with Mitigation Incorporated. The project site contains no recorded archaeological resources as defined in CEQA Guidelines Section 15064.5(3)(c) and CEQA Section 21083.2. However, intact subsurface historic-period and prehistoric archaeological deposits, which may qualify as archaeological resources, may be located within the project site. Implementation of Mitigation Measure CULT-2, described below, would reduce potential impacts to unidentified archaeological resources to a less-than-significant level.

Mitigation Measure CULT-2: If archaeological deposits are identified during project activities, a qualified archaeologist shall first determine whether such deposits are historical resources as defined in Section 15064.5. If these deposits do not qualify as historical resources a determination will be made if they qualify as unique archaeological resources, pursuant to Section 15064.5(3)(c). If the deposit qualifies as a unique archaeological resource it will need to be avoided by adverse effects or such effects must be mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparation of a report of findings; accessioning recovered archaeological materials at an appropriate curation facility; and public outreach, such as brochures or displays at libraries and museums. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the City and the Northwest Information Center.

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

Less Than Significant with Mitigation Incorporated. Paleontological resources could be discovered during grading and excavation work associated with project construction. Implementation of Mitigation Measure CULT-3, described below, would reduce potential impacts associated with disturbance to paleontological resources to a less-than-significant level.

Mitigation Measure CULT-3: If paleontological resources are uncovered during grading or other on-site excavation(s), earthwork within 25 feet of these materials shall

be stopped until a qualified paleontologist has had an opportunity to evaluate the significance of the find and suggest appropriate mitigation(s), as deemed necessary.

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

Less Than Significant with Mitigation Incorporated. No recorded human remains have been identified within the project site. However, such subsurface remains may exist in the project area. Implementation of Mitigation Measure CULT-4, described below, would ensure that potential impacts to human remains would be reduced to a less-than-significant level.

Mitigation Measure CULT-4: In the event that human remains are encountered, work within 25 feet of the discovery shall be redirected and the County Coroner notified immediately. At the same time, a qualified archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. Project personnel should not collect or move any human remains and associated materials. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the City and the Northwest Information Center.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	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:				
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 checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The following setting information and responses are based on a geotechnical study prepared by Kleinfelder West, Inc. in May 2007, which included a reconnaissance of the project site and several exploratory borings. The geotechnical study was prepared for the previously proposed Hiddenbrooke School and Park Project.

The project site is located in the North Coast Range Geomorphic Province of California. The northwest-trending ridges and intervening valleys in the region are controlled by the structure of the Coast Ranges, which consists of northwest-trending folds and faults. The Northern Coast Ranges contain mostly Mesozoic and Cenozoic sedimentary rocks.

The site is located near the central portion of Sky Valley a narrow, northwest-trending valley that is underlain by Great Valley Sequence material of early to late Cretaceous age. In the project area, the formation was observed to consist mainly of variably weathered mudstones and shales. The lower, flatter portions of the site are overlain by Pleistocene age alluvial fan and fluvial deposits. These deposits typically consist of brown, stiff to very stiff clays, dense, gravelly and clayey sand or clayey gravel to sandy clay. The deposits display variable sorting and are located along local stream channels.

The project site is located within Sky Valley, which is flanked by the Cordelia Hills (1,092 feet) to the east and Sulphur Springs Mountain (1,112 feet) to the west. There have been several large landslides on the slopes above Sky Valley, but none are mapped in the area of the proposed park. The slides consist of both recent active slides, as well as older slide deposits. The unstable slide material is within areas underlain by highly fractured Great Valley Sequence material. Generally, the valley floor portion of the project site is classified as having stable slopes while the surrounding hillsides are classified by the USGS as having unstable slopes.

The project site does not lie within an Alquist-Priolo Special Studies Zone. However, several faults have been mapped in the vicinity of the project site, including the Concord/Green Valley Fault located approximately 5 miles east and the West Napa Fault located approximately 3 miles to the northeast. The project site could also be subject to significant shaking from other faults in the Bay Area, such as the San Andreas and Hayward Faults.

Discussion

a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

Less Than Significant Impact. Surface rupture occurs when the ground surface is broken due to fault movement during an earthquake. The location of surface rupture generally can be assumed to be along an active or potentially active major fault trace. The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone. The nearest active faults are the Concord/Green Valley fault, located approximately 5 miles east and the West Napa Fault located approximately 3 miles northeast of the project site. No active or potentially active faults have been mapped at the project site; therefore, potential for fault rupture at the site is low.

ii) *Strong seismic ground shaking?*

Less Than Significant Impact. The project site and the entire San Francisco Bay Area is in a seismically active region subject to strong seismic ground shaking. Ground shaking is a general term referring to all aspects of motion of the earth's surface resulting from an earthquake, and is normally the major cause of damage in seismic events. The extent of

ground-shaking is controlled by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. Major active faults in the region that could cause ground shaking at the project site include the Concord/Green Valley, West Napa, San Andreas, and Hayward Faults. The proposed project shall be designed and constructed consistent with the most current earthquake resistance standards for Seismic Zone 4 in the California Building Code (CBC). Compliance with these provisions would reduce impacts associated with groundshaking to a less than significant level.

iii) *Seismic-related ground failure, including liquefaction?*

Less Than Significant Impact. According to the geotechnical study (Kleinfelder 2007), the possibility for hazard from ground failure or liquefaction is very low within the project site due to the lack of saturated sand layers near the surface and the absence of groundwater beneath the site. Therefore, impacts related to exposure of people and/or structures to risks related to liquefaction are considered less than significant.

iv) *Landslides?*

Less Than Significant with Mitigation Incorporated. As described above, landslides are present in the general area, as well as on the slopes east of the project site. Although proposed park improvements would not be developed in the sloped areas of the project site, proposed pedestrian and equestrian/emergency vehicle access routes would be located in hillside areas. The geotechnical study (Kleinfelder 2007) provided recommendations on appropriate remedial methods to manage landslides and potential soil movement, including buttressing landslide deposits at the top of cut slopes and using reinforced slopes for stability. Implementation of Mitigation Measure GEO-1, described below, would reduce potential impacts related to landslides to a less-than-significant level.

Mitigation Measure GEO-1: The proposed project shall incorporate all applicable recommendations contained in the geotechnical report prepared for the previously proposed Hiddenbrooke School and Park project (Kleinfelder 2007) and the requirements of the California Building Code to minimize any geophysical risks associated with construction of the proposed project. Prior to issuance of a grading permit, the City shall verify that the recommendations of the geotechnical report are included in the construction plans and specifications.

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

Less Than Significant Impact. Implementation of the proposed park improvements would include grading activities that could result in short-term soil erosion during the construction period. Exposed soils are considered erodible when subjected to concentrated surface flow or wind. However, construction specifications require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) prior to any ground disturbance activities as required by the National Pollutant Discharge Elimination System (NPDES) General Permit (GP) for Construction (Order 2009-009-DWQ). The SWPPP will provide the details of the erosion control measures to be applied on the project site during the construction period, including Best Management Practices

(BMPs) for erosion control that are recognized by the Regional Water Quality Control Board (RWQCB). Implementation of a SWPPP would reduce potential impacts to soil erosion or the loss of topsoil to a less than significant level.

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

Less Than Significant with Mitigation Incorporated. Soils on the site were deposited by alluvial conditions and are not expected to be collapsible or compressible. As described above, the potential for hazard from landslide is moderate and the potential for liquefaction is low. Therefore, the potential for liquefaction induced lateral spreading is also low. The project site is not located on Karst formations and has not been subjected to mining activities; thus, the risk of subsidence or collapse is expected to be low. Portions of the project site are susceptible to soil creep and landslide. However, no development is proposed in these areas. Implementation of Mitigation Measure GEO-1, described above, would reduce potential impacts to a less than significant level.

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

Less Than Significant with Mitigation Incorporated. Expansion and contraction of volume can occur when expansive soils undergo alternating cycles of wetting (swelling) and drying (shrinking). During these cycles, the volume of the soil changes markedly. Expansive soils are common throughout California and can cause damage to foundations and slabs unless properly treated during construction. Near surface soils on the site are potentially highly expansive. Expansive clays are subject to shrinking and swelling, due to variations in moisture content. However, the proposed project would be designed and constructed in accordance with the CBC using standard construction methods. The geotechnical study (Kleinfelder 2007) prepared for the project site contains recommendations for appropriate handling of expansive soils, including compaction and moisture conditioning guidelines, grading specifications, and structural foundation design. Implementation of Mitigation Measure GEO-1, described above, would reduce potential impacts related to expansive soils to a less-than-significant level.

- 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?*

No Impact. Septic tanks and alternative wastewater disposal systems would not be installed on the project site. Therefore, implementation of the proposed project would not result in impacts to soils associated with the use of such wastewater treatment systems.

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--------------------------------------	--	------------------------------------	--------------

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, based on any applicable threshold of significance? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Affected Environment

There is a general scientific consensus that global climate change is occurring, caused in whole or in part by increased emissions of greenhouse gases (GHGs) that keep the Earth’s surface warm by trapping heat in the Earth’s atmosphere. While many studies show evidence of warming over the last century and predict future global warming, the causes of such warming and its potential effects are far less certain. In its “natural” condition, the greenhouse effect is responsible for maintaining a habitable climate on Earth, but human activity has caused increased concentrations of these gases in the atmosphere, thereby contributing to an increase in global temperatures.

GHGs are present in the atmosphere naturally, are released by natural sources, or formed from secondary reactions taking place in the atmosphere. The six gases that are widely seen as the principal contributors to global climate change are: Carbon dioxide (CO₂), Methane (CH₄), Nitrous oxide (N₂O), Hydroflourocarbons (HFCs), Perflourocarbons (PFCs), and Sulfur Hexaflouride (SF₆).

The *BAAQMD CEQA Guidelines* include thresholds of significance for operational GHG emissions to provide lead agencies with a conservative indication of whether a proposed project could result in potentially significant GHG emissions. If all of the screening criteria are met by a proposed project, then the lead agency would not need to perform a detailed air quality assessment of the project’s air pollutant emissions, including GHG emissions. The BAAQMD has established a 1,100 metric tons of CO₂e/year GHG threshold of significance. According to the BAAQMD the screening level size for a City Park is 600 acres.

The BAAQMD does not have an adopted Threshold of Significance for construction-related GHG emissions. However, BAAQMD recommends that the Lead Agency quantify and disclose GHG emissions that would occur during construction, and make a determination on the significance of these construction generated GHG emission impacts in relation to meeting AB 32 GHG reduction goals. The Lead Agency is encouraged to incorporate best management practices, such as recycling at least 50 percent of construction waste or demolition materials, to reduce GHG emissions during construction, as applicable.

The primary existing sources of human-caused GHGs in the project area are vehicle emissions.

Discussion:

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?*

Less Than Significant with Mitigation Incorporated. As described above, the BAAQMD CEQA Guidelines include thresholds of significance for operational GHG emissions to provide lead agencies with a conservative indication of whether a proposed project could result in potentially significant GHG emissions. According to the BAAQMD the screening level size for a City Park is 600 acres. The proposed park, at 2-acres, is well below the screening size of 600 acres. Therefore, the proposed project is not expected to generate GHG emissions that would exceed the threshold established by the BAAQMD.

Short-Term GHG Emissions. Construction would produce combustion emissions from various sources. During site preparation and construction of the project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Furthermore, CH₄ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

Implementation of Mitigation Measure GHG-1 would ensure that the proposed project would not generate greenhouse gas emissions that may have a significant impact on the environment, based on any applicable threshold of significance.

Mitigation Measure GHG-1: To the extent feasible, the following measures shall be incorporated into the design and construction of the project:

- On-site idling of construction equipment shall be minimized (no more than 5 minutes maximum);
- Biodiesel shall be used as an alternative fuel to diesel for at least 15 percent of the construction vehicles/equipment used if there is a biodiesel station within 5 miles of the project site;
- At least 10 percent of building materials shall be local to the extent feasible; and
- At least 50 percent of construction waste or demolition materials shall be recycled.

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

No Impact. The proposed project is consistent with all the applicable local plans, policies and regulations and would not conflict with the provisions of AB 32, the applicable air quality plan, or any other State or regional plan, policy or regulation of an agency adopted for the purpose of reducing greenhouse gas emissions.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HAZARDS. 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 1/4 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project located 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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Affected Environment

A Phase I Environmental Site Assessment and Pipeline Risk Assessment were conducted for the project site (Kleinfelder 2004). No on-site potential sources of hazardous wastes were observed in the visual survey, and no hazardous waste sites were found within a two mile radius of the project site in the government records search. A natural gas pipeline is located along the western border of the site.

The Pipeline Risk Assessment found that the pipeline does not pose an unacceptable hazard to the users of the proposed park.

Discussion:

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

Less Than Significant Impact. The proposed land use would be a park. Normal operations would not introduce potentially hazardous materials. In addition, California law requires all businesses that use or store more than certain quantities of hazardous materials on-site to file hazardous materials business plans that list and map the location of onsite hazardous materials storage and use and that describe procedures in the event of an accident. Compliance with this law would reduce potential impacts to a less than significant level.

While gas and diesel fuel would typically be used by construction vehicles, Best Management Practices (BMPs) would be utilized to ensure that no construction-related fuel hazards occur. Use, storage, transport and disposal of hazardous materials (including any hazardous wastes) during construction activities would be performed in accordance with existing local, state, and federal hazardous materials regulations. Therefore, implementation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. This impact is considered less than significant.

- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Less Than Significant with Mitigation Incorporated. Construction activities would include the use of ordinary equipment fuels and fluids. In the unlikely event of a spill, fuels would be required to be controlled and disposed of in accordance with county and State regulations. Implementation of Mitigation Measure HAZ-1 would ensure that handling of materials during construction activities would not create a hazard to the public or the environment, thereby reducing potential impacts to less-than-significant levels.

Mitigation Measure HAZ-1: Project construction plans shall include emergency procedures for responding to hazardous materials releases for materials that will be brought onto the site as part of construction activities. The emergency procedures for hazardous materials releases shall include the necessary personal protective equipment, spill containment procedures, and training of workers to respond to accidental spills/releases. All use, storage, transport and disposal of hazardous materials (including any hazardous wastes) during construction activities shall be performed in accordance with existing local, state, and federal hazardous materials regulations.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1/4 mile of an existing or proposed school?*

No Impact. No existing or proposed schools are located within one-quarter mile of the project site. Therefore, the proposed project would not emit hazardous emissions or handle hazardous

or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.

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

No Impact. The project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and therefore would not create a hazard to the public or environment.

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

No Impact. The project site is not located within an airport land use plan, or within two miles of a public airport or public use airport. The closest airports to the project site are the Napa County Airport, approximately 6.2 miles northwest, Sonoma Valley Airport, approximately 15 miles west, and Buchanan Field, approximately 14 miles southeast. Therefore, given that the proposed project is not located within an airport land use plan or within two miles of an existing airport, the proposed project would not result in a safety hazard for people residing or working in the project area.

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

No Impact. The project site is not in the vicinity of a private airstrip. Therefore, implementation of the proposed project would not expose persons to airport-related hazards.

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

No Impact. The proposed project is the development of a park and associated infrastructure. Proposed park improvements would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

- h) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

Less Than Significant Impact with Mitigation Incorporated. The project site is in a suburban area that is surrounded by undeveloped open space/grazing lands. The wildland fire danger in this area is moderate. Development of the proposed project could expose people or structures to an increased risk of wildland fires. Implementation of the following mitigation measure would reduce the impact to a level below significance.

Mitigation Measure HAZ-2: The following shall be implemented to reduce risk due to wildland fires:

- Development shall be consistent with the Uniform Fire Code, and the Vallejo General Plan safety policies.
- Access shall be provided to adjacent grassland and open space areas for fire control.
- All project road widths and grades shall meet City of Vallejo standards.
- Fire hydrant locations shall be approved by the Fire Department.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding of as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Affected Environment

The Sky Valley and surrounding hills are drained by Sulphur Springs Creek, a perennial stream that begins in Sky Valley and runs south toward the city of Benicia. South of the site, Sulphur Springs Creek discharges into Lake Herman, an artificial flood control and municipal water storage reservoir. Below the lake, the creek flows around the east side of Benicia and into Suisun Bay. The Sulphur Springs Creek watershed encompasses approximately 11,600 acres. Upstream of Lake Herman, Sulphur Springs Creek has a deep, wide channel that gives it a high flow capacity exceeding the 100-year peak flow calculated for Lake Herman's upstream watershed. Downstream of Lake Herman, the area surrounding Sulphur Springs Creek lies within designated flood zones.

Water quality is regulated by the U.S. Environmental Protection Agency's National Pollution Discharge Elimination System (NPDES), which controls the discharge of pollutants to water bodies from point and non-point sources. In the Bay Area, this federal regulatory program is administered by the San Francisco Bay Regional Water Quality Control Board (RWQCB), which was expanded in 1990 to include permitting of stormwater discharges from storm sewer systems, industrial activities and construction sites that disturb more than 1 acre. The RWQCB permit for local construction sites like the project requires that individual landowners bear the responsibility for compliance.

Discussion:

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

Less Than Significant Impact. The proposed project would not violate water quality standards or discharge requirements. However, the proposed project could potentially result in short-term (construction) water quality impacts.

Long-Term Operational Impacts. Consistent with the requirements of the Municipal Regional Stormwater Permit (NPDES Permit No. CAS612008), the proposed park would include low-impact development (LID) and sustainable design features that would protect water quality and retain potential runoff on-site, such as bioswales, preservation of adjacent undeveloped open space areas and landscaped areas. In addition, pathways and parking areas would be constructed with permeable materials (i.e., permeable concrete, decomposed granite, permeable pavers) to promote infiltration of stormwater. With implementation of these LID and sustainable design features, long-term operation of the proposed park would have a less than significant impact on water quality.

Short-Term Construction Impacts. Construction of the proposed project would cause disturbances to the ground surface from earthwork, including excavating and grading. These activities could potentially increase the amount of sediment in site runoff. Increased sediment could negatively impact water quality and aquatic life downstream of the project site.

Materials used during construction could have chemicals that are potentially harmful to aquatic resources and water quality. Accidents or improper use of these materials could release contaminants to the environment. Additionally, oil and other petroleum products used to maintain and operate construction equipment could be accidentally released.

The National Pollutant Discharge Elimination System General Permit (GP) for Construction (Order 2009-009-DWQ) requires construction sites over one acre that do not qualify for a

waiver to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP shall incorporate Best Management Practices (BMPs) to control runoff and sedimentation. Compliance with the NPDES Permit is mandated by State and federal laws and new construction projects are required to comply with storm water general permits. Consistent with the State General Permit, the SWPPP would adhere to the following requirements:

- The SWPPP shall include measures to avoid creating contaminants, minimize the release of contaminants, and water quality control measures to prevent contaminants from entering surface water or percolating into the ground.
- The water quality control measures shall address both project construction and operation periods.
- Fluvial erosion and water pollution related to construction shall be controlled by a construction water pollution control program that shall be filed with the appropriate agency and kept current throughout any site development phase.
- The water pollution prevention program shall include BMPs, as appropriate, given the specific circumstances of the site and project.
- The SWPPP shall be submitted to the RWQCB in compliance with the requirements of the GP.
- A spill prevention and countermeasure plan shall be incorporated into the SWPPP.

Compliance with the requirements of the NPDES General Permit would reduce potential impacts during project construction to a less than significant level.

- 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)?*

No Impact. The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge as it would not draw on groundwater as a source of water supply. This impact is considered less than significant.

- 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?*

Less Than Significant Impact. Development of the proposed project would not significantly alter existing drainage patterns, including alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site. The proposed project would increase impervious surfaces on the project site. However, the amount of increased impervious surface would be small and the proposed project would include design features, such as permeable paving, bioswales and landscaped areas, to maximize water infiltration on the project site. During construction, BMPs would be implemented, consistent with the GP, so

that on-site and off-site erosion and sedimentation would be controlled to the extent practicable. Therefore, this impact is considered less than significant.

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

Less Than Significant Impact. No long term alteration of the drainage pattern of the project site or surrounding area would result from implementation of the proposed project. The proposed project would include minimal new impervious surfaces and would provide site features to maximize water infiltration and minimize any stormwater runoff that might result in flooding on- or off-site. Therefore, this impact is considered less than significant.

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

Less Than Significant Impact. As described above, the project includes design elements and measures, including BMPs to capture and allow for infiltration of stormwater runoff. Therefore, the proposed project would not create or contribute runoff water which would exceed the capacity of the existing system nor would it provide substantial additional sources of polluted runoff. This impact is considered less than significant.

- f) *Otherwise substantially degrade water quality?*

Less Than Significant Impact. See Response IX(a).

- g) *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

No Impact. The Solano County Flood Insurance Rate Map (Panel Number 0606310425B, effective August 2, 1982) shows the project area located within Zone C, which is defined as an area of minimal flooding. Furthermore, the proposed park project does not involve the construction of housing. Therefore, the proposed project would not result in the placement of housing in the 100-year flood hazard area.

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

No Impact. The project site is not located within a FEMA 100-year flood zone. The proposed project does not include the construction of any structures that could impede or redirect flood flows.

- i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding of as a result of the failure of a levee or dam?*

No Impact. The proposed project site is not located in the inundation area for any levee or dam in the project vicinity (ABAG 1995). As described above, the project site is not located within

the 100-year floodplain. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

j) *Inundation by seiche, tsunami, or mudflow?*

Less Than Significant Impact. There are no impacts related to seiche and tsunami given that there are no large bodies of water in close proximity to the project area and the project site is located substantially inland from the coast. Although topography is steep to the east of the project site, the proposed project would not alter the existing hillside terrain in a manner that would create mudflows, and therefore the potential impacts are considered less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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"/>

Affected Environment:

The 50-acre southern parcel of the Orchards property is not currently used for any purpose except for informal recreational use by local residents (e.g., dog walking, wildlife viewing, etc.).

Surrounding land uses are characterized primarily by the existing Hiddenbrooke residential development to the north, and the surrounding undeveloped open space areas to the east, south and west. Portions of the open space lands, which are primarily dominated by grassland vegetation, are leased for cattle grazing. The City of Vallejo Trails Master Plan designates a proposed hiking and jogging trail through the proposed project site.

Under the City of Vallejo General Plan (1999), and the Sky Valley Specific Plan, as amended (1992), the project site is designated as Agriculture and Open Space Preservation. Uses allowed under the Agriculture and Open Space Preservation designation include agricultural operations, managed production of resources, outdoor recreation and parks, open space for public health and safety, and public service facilities such as schools.

The project site is also part of the Tri-City and County Regional Park and Open Space Management Area and must be consistent with the guidelines contained in the *Tri-City and County Cooperative Plan for Agriculture and Open Space Preservation* (Cooperative Plan; The Planning Collaborative 1994). The Tri-City and County Regional Park and Open Space Management Area is an approximately 10,000 acre open space area intended to provide regional recreational and open space facilities for Benicia, Fairfield, Vallejo and Solano County. The Tri-City and County Area is intended for recreation, open space, habitat, managed resources production and agricultural resources protection, and does not allow for urban development. However, the City of Vallejo and the owner of the Orchards property at the time, the Owens Mortgage Investment Fund, entered into a development agreement (City of Vallejo 1999a) to provide for a school and park site within this area, as described below.

The development agreement designated the 16-acre northern portion of the Orchards property for residential development and designated the 50-acre southern portion of the property for public open space, elementary school, and park uses. The development agreement required the recordation of a conservation easement over the 50-acre southern portion of the property (City of Vallejo 1999b). The easement was granted to the following organizations: City of Vallejo, Tri-City and County Cooperative Planning Group for Open Space and Agriculture, and the Solano Land Trust. In addition to agricultural and recreational uses, the conservation easement expressly permits the use of up to 10 net useable acres for public elementary school purposes and up to eight net useable acres for developed park purposes.

The entire Hiddenbrooke development, including the park site, is zoned by the City of Vallejo as a Mixed Used Planned Development (MUPD). The Hiddenbrooke development is sub-zoned according to the planned use of individual areas.

Discussion:

a) *Physically divide an established community?*

No Impact. The proposed project would not physically divide an established community. The park would be located just south of the existing Orchards at Hiddenbrooke residential development and would be surrounded on three sides by open space lands.

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?*

Less Than Significant Impact. The proposed park project would not conflict with the City of Vallejo General Plan (General Plan), the Sky Valley Specific Plan, as amended, or the Cooperative Plan. Although the site is designated as Agricultural Open Space, the development agreement entered into for the project site allows for development of a park.

Implementation of the proposed project would create a public recreational facility (neighborhood park) to serve Hiddenbrooke residents. Consistent with the goals and principles of the Cooperative Plan, the project has been designed to minimize impacts to natural resources, particularly riparian habitat. In addition, the project would provide a recreation connection to adjacent open space lands that are part of the Tri-City and County Regional Park and Open Space Management Area.

The proposed project is consistent with the types of uses allowed under the MUPD zoning district and does not conflict with any policy or regulation contained within the General Plan or City of Vallejo Municipal Code. Therefore, this impact is considered less than significant.

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

No Impact. The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment:

Minerals are any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances including, but not limited to, coal, peat and oil bearing rock, but excluding geothermal resources, natural gas and petroleum. Rock, sand, gravel and earth are also considered minerals by the Department of Conservation when extracted by surface mining operations.

The State Mining and Reclamation Act of 1975 (SMARA) identifies and protects California’s mineral resources. In the project vicinity, a deposit of greenstone and graywacke of the Franciscan Complex form, which has been classified as having value for crushed stone, has been identified at Sulphur Springs Mountain. A portion of the deposit lies on the eastern side of Vallejo’s Sphere of Influence, and is more commonly known as the Lake Herman Quarry or the Syar Industries Quarry. This deposit is a state protected mineral resource as a source of construction aggregate because it is easily accessible by neighboring highways, and because the land it occupies is under pressure from competing land uses. The City of Vallejo upholds its policy to protect mineral resources of statewide and regional importance within its sphere of influence.

Discussion:

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

No Impact. The proposed project is not located on or immediately adjacent to the closest known mineral resource discussed above, and would not affect its availability.

b) *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

No Impact. The proposed project would not result in the loss of availability of any locally-important mineral resource recovery site.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne 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 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<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 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"/>

Affected Environment:

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A *decibel* (dB) is a unit of measurement that indicates the relative intensity of a sound. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3.0 dB or less are only perceptible in laboratory environments. Audible increases in noise levels generally refer to a change of 3.0 dB or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness. Sound intensity is normally measured through the *A-weighted sound level* (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive.

In the City of Vallejo, vehicular traffic on roadways is the predominant source of noise. Airplanes and mechanical equipment also contribute to noise. Noise levels are typically highest along highways and major traffic corridors. Noise-sensitive land uses in Vallejo include schools, hospitals, nursing homes,

parks, and residential areas. The City of Vallejo addresses noise in the City’s General Plan and noise ordinance of the City Code.

According to the updated Noise Element of the City’s General Plan (2006), the acceptable noise level at primary outdoor use areas for residences should not exceed 60 dBA. For schools, libraries, churches, hospitals, nursing homes, playgrounds, and neighborhood parks, the acceptable noise level should not exceed 70 dBA. The interior noise standard is 45 dBA for all residential, transient lodging, school classrooms, libraries, churches, hospitals, and convalescent homes.

The City’s maximum allowable noise levels from construction equipment are included below in Table A.

Table A: Maximum Allowable Noise Levels from Construction Equipment

Equipment	Peak Noise Level in dBA at 50 Feet
<u>Earthmoving</u>	
Front loader, backhoe, dozer	75
Tractor, grader, truck, scraper, paver	80
<u>Materials Handling</u>	
Concrete mixer, crane, concrete pump, derrick	75
<u>Stationary</u>	
Pumps, generators, compressors	75
<u>Impact</u>	
Pile drivers	95
Jackhammers	75
Rock drills, pneumatic tools	80
<u>Other</u>	
Saws, vibrator	75

Source: City of Vallejo General Plan (1999)

Discussion:

- 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?*

Less Than Significant with Mitigation Incorporated. The project site is located in a residential area with low level background noise. The proposed project involves construction of a park to serve the Hiddenbrooke community. This land use would not generate high ambient noise levels. Noise sources associated with recreation use, such as human voices or barking dogs would not result in the exposure of persons to or generation of noise levels in excess of City of Vallejo standards. Further, the proposed project is not anticipated to generate a significant increase in the number of car trips to/from the project site. Thus, changes to ambient noise levels along local streets leading to the park and adjacent to the park site are not expected. No substantial long-term increase in ambient noise levels is expected as a result of project implementation.

Construction of the proposed project would require excavation and earthwork activities that could generate noise levels that exceed established thresholds. Although these activities could result in infrequent periods of high noise, this noise would not be sustained and would occur only during the temporary construction period. No pile driving or other construction activity

that would generate high noise levels or ground borne vibration would occur within the project site. Short term noise levels would be reduced to the extent practicable by the mitigation measures presented below. Implementation of Mitigation Measures NOISE-1 through NOISE-5 would reduce potential impacts to less-than-significant levels.

Mitigation Measure NOISE-1: During construction, the City shall require that the contractor shall ensure that all construction is performed in accordance with applicable City noise standards and guidelines. All noise-generating construction and maintenance activities shall be conducted between 8 a.m. and 5 p.m.

Mitigation Measure NOISE-2: During construction, the City shall require the contractor to ensure that all equipment is maintained in proper working order, including proper muffling.

Mitigation Measure NOISE-3: During construction, the contractor shall locate portable equipment as far as possible from adjacent residences.

Mitigation Measure NOISE-4: During construction, the contractor shall store and maintain equipment as far as possible from adjacent residences.

Mitigation Measure NOISE-5: If construction-related noise exceeds City standards for non-transportation sources, the City shall require the contractor to implement additional appropriate noise-reducing measures, including but not limited to, changing the location of stationary construction equipment, shutting off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around construction noise sources.

- b) *Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?*

Less Than Significant Impact. Construction of the proposed project would require excavation and earthwork activities. Although these activities could result in infrequent periods of high noise, this noise would not be sustained and would occur only during the temporary construction period. No pile driving or other construction activity that would generate very high noise levels or ground borne vibration would occur on the project site. Therefore, this impact is considered less than significant.

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

Less Than Significant Impact. As described in Response XI(a) above, the proposed project, once complete, would consist of a neighborhood park. This land use is not expected to generate high ambient noise levels. Noise sources associated with recreation use, such as human voices or barking dogs would not result in a substantial permanent increase in ambient noise levels in the project vicinity. Further, the proposed project is not anticipated to generate a significant increase in the number of vehicular trips to/from the project site. Thus, changes in the ambient noise levels on local roadways are not expected. The proposed project would not result in a

substantial permanent increase in ambient noise levels. This impact is considered less than significant.

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

Less Than Significant with Mitigation Incorporated. Construction activities associated with implementation of the proposed project could temporarily increase ambient noise levels. However, these noise levels would occur in association with excavation and earthwork activities, and would be intermittent and short term. Implementation of Mitigation Measures NOISE-1 through NOISE-5 would reduce potential impacts to less-than-significant levels.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

No Impact. The project is not located within an airport land use plan or within two miles of a public use airport. Implementation of the proposed project would not be affected by operations associated with a public use airport.

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

No Impact. The project site is not located within five miles of a private airstrip. Implementation of the proposed project would not be affected by operations associated with a private air strip.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	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 type="checkbox"/>	<input checked="" 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"/>

Affected Environment:

The proposed park would be located on vacant land just south of the existing Orchards at Hiddenbrooke residential development. Land uses in the project vicinity consist of residential development and undeveloped open space.

Discussion:

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)?*

No Impact. The proposed project would not result in new housing, commercial, or industrial space would be developed as part of the proposed project. Therefore, the proposed project would not directly or indirectly induce substantial population growth.

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

No Impact. No housing currently exists at the project site. Therefore, the project would not displace any existing housing.

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

No Impact. The project would not displace any people, as the project site is currently unpopulated.

	Potentially Significant	Potentially Significant	Less Than Significant	No Impact
	Unless Mitigation Incorporated		Impact	

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"/>

Affected Environment:

The project site is in a suburban area served by existing public services as follows:

Police Protection. Police protection to the project site is provided by the Vallejo Police Department. The city is currently served by 131 sworn officers, or 1.13 officers per 1,000 people. Service to northeast Vallejo currently originates from the Department’s central facility, at 111 Amador Street in Vallejo. Existing Beat Patrol #1 serves the project area, with a response time of three to four minutes for life-threatening calls and four to five minutes for other calls. A new beat is planned to serve northeast Vallejo, out of a station near I-80/Highway 37 (Columbus Parkway) interchange. This new beat would serve the Hiddenbrooke development and the project site. Response time to the project site within this new beat is estimated to be a maximum of three to four minutes.

Fire Protection. The Vallejo Fire Department serves the project area. Primary response to this area is from Station No. 27 (former Fire Station No. 7), located near Columbus Parkway at 1585 Ascot Court, and secondary response is from Station No. 5 (595 Mini Drive).

Schools. The project site is located within the boundaries of VCUSD. In the project area, elementary school children attend Loma Vista Elementary School (146 Ranier Street) or Widenmann Elementary School (100 Whitney Drive); middle school students attend Solano Middle School (1025 Corcoran Avenue) and high school students attend Hogan High School (850 Rosewood Avenue).

Parks. For a discussion of parks, see Section XV. Recreation.

Discussion:

- 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, police protection, schools, parks, other public facilities?*

Less Than Significant Impact/No Impact. Implementation of the proposed project would improve the site as a neighborhood park to serve the Hiddenbrooke community. Use of the site would increase as a result of proposed improvements. However, visitors to the site are anticipated to come primarily from the local neighborhood, those people generally reside within walking distance of the project site. Because the project would not increase the population in the area, impacts associated with an increased demand for fire protection services or for police protection are considered less than significant.

Implementation of the proposed project would not result in any local or regional population increase. Therefore, the project would not require construction of new schools, or result in schools exceeding their capacities.

The proposed project would contribute to alleviating recreation needs in the Hiddenbrooke community. Implementation of the proposed project would provide a beneficial impact to the Hiddenbrooke neighborhood. No additional demand for park facilities would be generated as a result of the proposed project.

The proposed project is not expected to result in impacts to other public facilities.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	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?
- 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Affected Environment:

There are no parks in the immediate vicinity of the proposed project, but significant areas of open space surround the Hiddenbrooke development. This undeveloped open space includes the Eastern Swett Ranch and Vallejo Swett Ranch which are owned and managed by the Solano Land Trust.

The City of Vallejo has forty-one parks, community and neighborhood centers. The closest of the parks is the Blue Rock Springs Complex, approximately 2 miles southwest of the project site. This 300-acre park includes a Golf Course, the Skyview Reservoir, the Hanns Memorial Preserve and the Blue Rock Springs Corridor. Just west of this park is Wardlaw Park East (9.64 acres) and Wardlaw Park West (3.16 acres). These parks include a basketball court, soccer field, multi-use field, skateboard park, a dog park, picnic areas, restrooms and parking. Approximately 2.5 miles west of the project site is the 11-acre Crest Ranch Park, which features children’s play equipment, picnic tables, softball fields, basketball courts, a horseshoe pit, restrooms and parking. About 3 miles west of the project site is the 3-acre Borges Park, which has children’s play equipment, a multi-use field, picnic tables and a perimeter trail.

Discussion:

- 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?*

No Impact. The proposed project would have no impact on existing neighborhood and regional parks or other recreational facilities since the project provides recreational facilities and does not generate demand for such uses.

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

Less Than Significant with Mitigation Incorporated. The proposed project is a recreation facility. Potential adverse effects on the environment have been addressed in this Initial Study.

Implementation of the mitigation measures described in this Initial Study would reduce potentially adverse physical environmental impacts to less than significant levels.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted polices, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment:

Interstate 80 (I-80) and American Canyon Road provide regional access to the project site. Local access is via Hiddenbrooke Parkway, a four-lane roadway that connects to American Canyon Road just south of its interchange with I-80. From Hiddenbrooke Parkway, direct access to the project is provided via Bennington Drive, Landmark Drive, and Alder Creek Road.

Discussion:

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

Less Than Significant Impact. The proposed project would improve the project site for use as a neighborhood park, including development of an equestrian parking area to accommodate up to

three trucks with trailers. The focus of the proposed project is to address the park and recreation needs of the local neighborhood—those people within walking/biking distance of the project site. Equestrian use is anticipated to be limited and will be on a scheduled (guided by Solano Land Trust) basis as the adjacent open space lands are not “open to the public.” Implementation of the proposed project would not interfere with traffic on local roadways since the number of trips to and from the park would not generate a substantial number of peak AM and PM vehicle trips and would not significantly affect the existing or future traffic load and capacity of local roadways. This impact is less than significant.

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

No Impact. As the Congestion Management Agency (CMA) for Solano County, the Solano Transportation Authority (STA) is responsible for establishing, implementing and monitoring the County’s Congestion Management Program (CMP). Through its implementation of the CMP, the STA works to ensure that roadways operate at acceptable levels of service and reviews development proposals to ensure that transportation impacts are minimized. As described in Response (a), the trip generation for the proposed project would be negligible. Therefore, the proposed project would not conflict with the Solano County CMP.

- c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?*

No Impact. The project does not propose any structures that would interfere with air traffic patterns; nor would it increase traffic levels. There is no impact related to air traffic.

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

Less Than Significant Impact. The proposed project would be designed and constructed in conformance with all applicable City standards. The proposed park would be consistent with the City of Vallejo General Plan and the Sky Valley Specific Plan and the surrounding neighborhood. As a result, the proposed project would not substantially increase hazards for vehicles or park users due to a design feature or incompatible uses.

- e) *Result in inadequate emergency access?*

No Impact. The proposed park project would improve emergency vehicle access on the 50-acre southern parcel of the Orchards property and will also improve access to the open space areas on the adjacent Eastern Swett Ranch. Therefore, the proposed project would not result in inadequate emergency access.

- f) *Conflict with adopted polices, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*

No Impact. The project does not conflict with adopted policies or programs supporting alternative transportation. The City's General Plan contains policies to encourage pedestrian and bicycle traffic to reduce dependency on the automobile. As described above, the proposed park would be used by local residents—those people within walking/biking distance of the project site.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. 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 checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, State, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Affected Environment:

Utilities and service systems for the project site are described below.

Water. The water supply for the project site would stem from existing infrastructure created for the Hiddenbrooke and Orchards residential developments north of the project. A water main was extended south from the Orchards residential development when the Alder Creek Road bridge was constructed across the unnamed tributary drainage. The water system for the proposed project would be supplied by the City of Vallejo, which obtains water from the Solano Water Agency and the Department of Water Resources as well as several local reservoirs in the Vallejo region. Vallejo's water supply is treated at the Fleming Hill Treatment Plant.

Wastewater. As part of the Hiddenbrooke development, a wastewater collection system was developed that includes gravity sewer lines, pump stations, and force mains. These facilities convey wastewater across the Vallejo Swett Ranch via the Hiddenbrooke Utility Corridor to a sewer system

located in Columbus Parkway. The Columbus Parkway sewer main is owned by the Vallejo Sanitation and Flood Control District (District). The wastewater, carried by this main, flows by gravity and is pumped to the District's Ryder Street Wastewater Treatment Plant. The wastewater collection system for the proposed park project would tie in with the existing wastewater collection system established for the Orchards residential project located to the north. The wastewater system was extended south from the Orchards residential development when the Alder Creek Road Bridge was constructed across the unnamed tributary drainage.

Stormwater. As described in Section VIII. Hydrology and Water Quality, the proposed project would include site design elements to capture and allow for infiltration of stormwater runoff. The stormwater management system for the proposed project includes LID features such as permeable paving in the parking area, bioswales, as well as pervious and semi-pervious components (*i.e.*, trails, walkways, play areas).

Solid Waste. The project site is serviced by Vallejo Garbage Service, Inc. which transports solid waste and recycling to the Devlin Road Transfer Station at 889 Devlin Road in American Canyon. Three active landfill sites are located in Solano County, including one in Vacaville, one in Fairfield and one in Rio Vista.

Other Utilities. Solano County energy is delivered through facilities provided by Pacific Gas and Electric (PG&E).

Discussion:

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

Less Than Significant Impact. The *Sky Valley Water and Sewer Master Plan* estimated that the school/park development previously proposed on the southern parcel of the Orchards property, would generate an equivalent amount of wastewater as 69 homes, which equals a total average daily flow (ADF) of 14,904 gallons per day. The proposed park, at 3.2 acres, would generate even less wastewater. The slight increase in wastewater generated by the proposed park would be negligible and would not result in a violation of any water quality standards or waste discharge requirements. Therefore, this impact is less than significant.

- b) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Less Than Significant Impact. The proposed project would not result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. The amount of additional water demand and wastewater generation would be proportionally small and would not exceed the capacity of existing facilities. This impact is considered less than significant.

- c) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Less Than Significant Impact. As stated previously, the proposed project would increase impervious surfaces on the project site. However, the amount of increased impervious surface would be small and the proposed project would include design features, such as permeable paving, bioswales, preservation of undeveloped open space, and landscaped areas, to maximize water infiltration on the project site. Therefore, the proposed project would not result in an increase in stormwater runoff, requiring or resulting in the construction of new stormwater drainage facilities or expansion of existing facilities.

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

Less Than Significant Impact. The *Sky Valley Water and Sewer Master Plan* estimated that the school/park development previously proposed on the southern parcel of the Orchards property would generate an average daily water demand of 57,600 gallons. The proposed park, at 3.2 acres, would generate an even lower daily water demand, which would not significantly increase demand on existing water entitlements. No new or expanded water entitlements are needed. This impact is considered less than significant.

- e) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Less Than Significant Impact. The projected wastewater generation resulting from implementation of the proposed project would be proportionally small and would not exceed the current capacity of existing facilities. This impact is considered less than significant.

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

Less Than Significant Impact. Operation of the proposed project is not anticipated to generate a significant amount of solid waste. Construction of the proposed project would generate construction waste. However, the amount of construction waste would not be substantial and would not result in a substantial reduction in the capacity of a landfill. Therefore, this impact is considered less than significant.

- g) *Comply with federal, State, and local statutes and regulations related to solid waste?*

Less Than Significant Impact. The proposed project would promote recycling on-site. Receptacles for recyclable waste would be provided as part of proposed improvements and the City would contract with appropriate entities for the removal and processing of recyclable waste. The City of Vallejo currently complies with federal, State, and local statutes related to solid waste recycling. These programs would continue with implementation of the proposed project and potential impacts are considered less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.

- | | | | | |
|---|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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"/> |
- a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?*

Less Than Significant with Mitigation Incorporated. As described in the sections above, all environmental effects were determined to be less than significant or reduced below levels of significance with mitigation. The proposed project would result in the development of a park facility that could affect the environment. Implementation of the mitigation measures recommended in this Initial Study would ensure that construction and operation of the proposed project would not substantially degrade the quality of the environment; reduce the habitat, population, or range of a plant or animal species; or eliminate important examples of California history or prehistory.

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

Less Than Significant Impact. The impacts of the proposed project are individually limited and not cumulatively considerable. The proposed project would result in development of a park

to serve the existing residential community immediately to the north. All environmental impacts that could occur as a result of the project would be reduced to less than significant levels through implementation of the mitigation measures recommended in this Initial Study.

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

Less Than Significant with Mitigation Incorporated. During project construction, the proposed project could result in environmental effects, such as short term construction noise, air quality, and hazardous materials impacts. Implementation of the mitigation measures recommended in this Initial Study would ensure that construction of the proposed project would not cause adverse effects on human beings.

REPORT PREPARERS AND REFERENCES

A. REPORT PREPARERS

LSA Associates, Inc.

157 Park Place
Point Richmond, CA 94801

Sean O'Brien, Principal
Laura Lafler, Principal, Senior Environmental Planner
Shanna Guiler, AICP, Senior Planner
Tim Jones, Senior Cultural Resources Manager

B. REFERENCES

Association of Bay Area Governments, 2007. Association of Bay Area Governments Fault Rupture Hazards Information Web Page. Accessed on March 18, 2007:
<http://www.abag.ca.gov/bayarea/eqmaps/faults/>

California Department of Transportation. 1999. California Scenic Highway Program Web Page, Accessed on December 19, 2007: http://www.dot.ca.gov/hq/LandArch/scenic_highways/

California Natural Diversity Database (CNDDDB). 2013. Special-status species occurrences within 5 miles of project site. Biogeographic Data Branch, California Department of Fish and Wildlife, Sacramento.

City of Vallejo. 1998. Addendum to the Final Supplement to the Environmental Impact Report for the Sky Valley (Hiddenbrooke) Orchards Project. Vallejo, California. September, amended January, 1999.

City of Vallejo. 2006. City of Vallejo Municipal Code. Adopted April 11, 2006. Accessed on February 27, 2008: <http://municipalcodes.lexisnexis.com/codes/vallejo/>

City of Vallejo. 1999. Development Agreement By and Between the City of Vallejo and Owens Mortgage Investment Fund. July 1.

City of Vallejo. 1999. Vallejo General Plan. July. Vallejo, California.

ESA Planning and Environmental Services. 1986. Sky Valley Project, Vallejo Environmental Impact Report. SCH # 86022519. Report prepared for the City of Vallejo. December.

- Fard Engineers. 2007. Hiddenbrooke Elementary Lighting Narrative - Technical Memorandum to TLCDC Architects. March 31.
- Kleinfelder. 2004. Phase I Environmental Site Assessment, Hiddenbrooke Elementary and Pipeline Risk Analysis, Alder Creek Rd., Vallejo, California. Report prepared for the Vallejo City Unified School District. December 16.
- Kleinfelder. 2007. Geologic Hazards Assessment and Geotechnical Investigation Report, Hiddenbrooke Elementary School, End of Alder Creek Road, Vallejo, California. File No. 70800/1. May 30th.
- LSA Associates, Inc. 2002. Results of Rare Plant, Nesting Raptor Surveys, and California Red-legged Frog Assessment. Letter Report Prepared for Triad Communities, L.P. September 10.
- LSA Associates, Inc. 2006a. First Annual Monitoring Report, Orchards at Hiddenbrooke California Red-legged Frog Mitigation, City of Vallejo, Solano County, California. Report Prepared for City of Vallejo. March 24.
- LSA Associates, Inc. 2006b. Delineation of Waters of the United States, Proposed Hiddenbrooke School and Park. City of Vallejo, Solano County, California. Prepared for Vallejo City Unified School District. October 27.
- LSA Associates, Inc. 2007. Biological Assessment for the Proposed Hiddenbrooke Phase 3 Residential Development Project (Revised). Solano County, California. Prepared for Triad Communities, L.P., Vallejo, California. January 5.
- LSA Associates, Inc. 2008a. Second Annual Monitoring Report, Orchards at Hiddenbrooke California Red-legged Frog Mitigation, City of Vallejo, Solano County, California. Report Prepared for City of Vallejo. January 8.
- LSA Associates, 2008b. Public Review Draft CEQA Initial Study Hiddenbrooke School and Park Project. Prepared for the Vallejo City Unified School District. April 11.
- Meridian Associates, Inc. 2007. Storm Water Control Plan for the Hiddenbrooke School and Park Site. Report prepared for the Vallejo Unified School District. March 13.
- Murphy D. D. and Weiss S.B. 1990. Report on Surveys for the Callippe Silverspot Butterfly, *Speyeria callippe callippe*, at the Proposed Sky Valley Development Site.
- National Flood Insurance Program. 1982. Flood Insurance Rate Map (FIRM) for Solano County, California (Unincorporated Areas). Community Panel Number 0606310425B. Effective Date: August 2.
- Planning Cooperative, Inc. 1994. Tri-City and County Cooperative Plan for Agriculture and Open Space Preservation – Concept Plan and Policy Program Report. Approved by the Tri-City and County Cooperative Planning Group on March 31, 1994. Amended October 20.

- Resource Management International (RMI) 1998. Sky Valley and Northgate Open Space Areas Resource Management Plan. Report prepared for Greater Vallejo Recreation District. Vallejo, California. May.
- Solano Land Trust (SLT) 2007. Initial Baseline Survey: Vallejo Swett, Eastern Swett, & King Ranches. Solano County, California. Prepared by Solano Land Trust and Pacific Gas and Electric Company. March.
- United States Army Corps of Engineers (USACOE) 2008. Confirmation of the Extent of Corps of Engineers Jurisdiction, Hiddenbrooke School and Park Site. Corps File Number 400215N. Letter to LSA Associates, Inc., dated May 30.
- United States Fish and Wildlife Service (USFWS) 2010. Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for the California Red-legged Frog; Final Rule. Federal Register. 75 (51): 12816—12959.
- Wagstaff and Associates. 1992. Draft Supplement to the Environmental Impact Report for the Sky Valley Orchards Project. SCH# 92023018. Report prepared for the City of Vallejo. December 28th.
- Wagstaff and Associates. 1992. Final Supplement to the Environmental Impact Report for the Sky Valley Orchards Project, Responses to Comments on Draft SEIR. SCH#92023018. Report prepared for the City of Vallejo. March.